	Ref #	Hits	Search Text
1	S1	1	("20070042950").PN.
2	S2	5	(("7026281") or ("6057422") or ("5792747") or ("5416073") or ("6380358")).PN.
3	S3	0	Achally-andrew-v.in.
4	S4	44	schally-andrew-v.in.
5	S5	24	varga-jozsef.in.
6	S6	9	zarandi-marta.in.
7	S7	10	cai-ren-zhi.in.
8	S8	1475	GhRH
9	S9	9	GhRH and "His.sup.9"
10	S10	0	GhRH same "His.sup.9"

INVENTOR SEARCH

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FILE LAST UPDATED: 19 Sep 2007 (20070919/ED)

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=> => d que l19
L1 1 SEA FILE=CAPLUS ABB=ON US2006-566776/AP
L2 1256 SEA FILE=CAPLUS ABB=ON SCHALLY A?/AU
L3 840 SEA FILE=CAPLUS ABB=ON VARGA J?/AU
L4 101 SEA FILE=CAPLUS ABB=ON ZARANDI M?/AU
L5 1127 SEA FILE=CAPLUS ABB=ON CAI R?/AU
L9 227 SEA FILE=REGISTRY ABB=ON [YH][R'CIT']DA[IV][FY'NAL']T[N'CIT'QS TA'ABU''AIB']...[K'ORN''HAR''CIT''NLE'A]VL[GA'ABU''AIB''NLE'Q'C IT'H][QR]LS[A'ABU'][HR'CIT'][K'ORN''CIT'][LA'AIB']LQDI[ML'NLE'' ABU'R][R'HAR'SNDA'ABU''CIT'].SQSP
L14 73 SEA FILE=CAPLUS ABB=ON L9
L19 3 SEA FILE=CAPLUS ABB=ON (L1 AND L14) OR (L2 AND L3 AND L4 AND L5 AND L14)

=> d ibib abs hitseq l19 1-3

L19 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1208697 CAPLUS Full-text
DOCUMENT NUMBER: 144:246654
TITLE: Inhibition of human androgen-independent PC-3 and DU-145 prostate cancers by antagonists of bombesin and growth hormone releasing hormone is linked to PKC, MAPK and c-jun intracellular signalling
AUTHOR(S): Stangelberger, Anton; Schally, Andrew V.; Varga, Jozsef L.; Zarandi, Marta; Cai, Ren-Zhi; Baker, Benjamin; Hammann, Brian D.; Armatis, Patricia; Kanashiro, Celia A.
CORPORATE SOURCE: Veterans Affairs Medical Center, Polypeptide and Cancer Institute, New Orleans, LA, 70112-1262, USA
SOURCE: European Journal of Cancer (2005), 41(17), 2735-2744
CODEN: EJCAEL; ISSN: 0959-8049

PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Bombesin/gastrin-releasing peptide (BN/GRP) antagonists RC-3940-II and RC-3940-Et, and growth hormone-releasing hormone (GHRH) antagonists MZ-J-7-118 and RC-J-29-18 inhibit the growth of human androgen-independent PC-3 and DU-145 prostate cancers in nude mice. Additive inhibitory effects were observed after treatment with both classes of analogs. In the present study, we investigated the effects of these antagonists on intracellular signaling pathways of protein kinase C (PKC), mitogen activated protein kinases (MAPK) and c-fos and c-jun oncogenes that are involved in tumor cell proliferation. In PC-3 tumors, antagonists of BN/GRP and GHRH decreased significantly the expression of PKC isoforms alpha (α), eta (η) and zeta (ζ) and increased that of delta (δ) PKC protein. MAPK was not detectable. In DU-145 tumors, which constitutively express MAPK, all treatments strongly decreased the levels of p42/44 MAPK. Treatment with the antagonists tended to reduce m-RNA for c-jun in both tumor models. In proliferation assays in vitro, inhibitors of PKC and MAPK diminished growth of DU-145 and PC-3 cells. These findings suggest that antagonists of BN/GRP and GHRH inhibit the growth of androgen-independent prostate cancer by affecting intracellular signaling mechanisms of PKC, MAPK and c-jun.
IT 845715-95-9, MZ-J-7-118
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GHRH antagonist MZ-J-7-118 down-regulated expression of PKC, MAPK, c-jun mRNA involved in intracellular signaling there by inhibited tumor cell proliferation in human PC-3 and DU-145 prostate cancer cell line carrying mouse models)
RN 845715-95-9 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY(HK)VLXQLSAR KLLQDIXRX

IT 845716-11-2, RC-J-29-18
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GHRH antagonist RC-J-29-18 down-regulated expression of PKC, MAPK, c-jun mRNA involved in intracellular signaling there by inhibited tumor cell proliferation in human PC-3 and DU-145 prostate cancer cell line carrying mouse models)
RN 845716-11-2 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:810564 CAPLUS Full-text
DOCUMENT NUMBER: 143:399123
TITLE: Antagonists of growth hormone releasing hormone (GHRH) and of bombesin/gastrin releasing peptide (BN/GRP) suppress the expression of VEGF, bFGF, and receptors of the EGF/HER family in PC-3 and DU-145 human androgen-independent prostate cancers
AUTHOR(S): Stangelberger, Anton; Schally, Andrew V.; Varga, Jozsef L.; Hammann, Brian D.; Groot, Kate; Halmos, Gabor; Cai, Ren-Zhi; Zarandi, Marta
CORPORATE SOURCE: Endocrine, Polypeptide, and Cancer Institute, Veterans Affairs Medical Center, New Orleans, LA, USA
SOURCE: Prostate (Hoboken, NJ, United States) (2005), 64(3), 303-315
CODEN: PRSTDS; ISSN: 0270-4137
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone releasing hormone (GHRH) as well as antagonists of bombesin/gastrin releasing peptide (BN/GRP) inhibit the growth of various malignancies (cancers) including prostate cancer. We investigated the effects of GHRH antagonists MZ-J-7-118 and RC-J-29-18, BN/GRP antagonists RC-3940-II and RC-3940-Et and the combination of MZ-J-7-118 and RC-3940-11 on the growth of PC-3 and DU-145 human androgen independent prostate cancers xenografted s.c. into nude mice. To elucidate the mechanisms of action of these analogs, growth factors like IGF-II (insulin-like growth factor-II), vascular endothelial growth factor (VEGF), basic fibroblast growth factor (bFGF), and epidermal growth factor receptor/human epidermal growth factor receptor (EGF-R/HER) family were measured in tumors as well as IGF-I in serum. Antagonists of GHRH and BN/GRP alone or in combination significantly inhibited growth of PC-3 and DU-145 tumors, the greatest inhibition of tumor volume being achieved by combination of MZ-J-7-118 (5 ng/day) and RC-3940-II (10 μg/day). BN/GRP and GHRH antagonists and their combination also decreased the expression of VEGF significantly in PC-3 and non-significantly in DU-145, as measured by RIA for VEGF protein and RT-PCR for mRNA levels of VEGF. GHRH and BN/GRP antagonists reduced bFGF concns. and the maximal binding capacity of EGF receptors, and their mRNA levels in PC-3 and DU-145 tumors. MRNA levels for HER-2 and -3 were also diminished in PC-3 tumors by GHRH and BN/GRP antagonists. No changes in HER-4 were found after treatment. Serum IGF-I and tumoral IGF-II levels were not affected by the analogs. BN/GRP and GHRH antagonists inhibit growth of PC-3 and DU-145 prostate cancers by suppressing the expression of tumoral growth factors such as VEGF and bFGF as well as the receptors for EGF and related HER-2 and -3. Additive effects on tumor inhibiton (TI) in vivo, but not on VEGF, bFGF, or members of the EGF/HER receptor family, can be achieved by the joint administration of both classes of analogs.

IT 845715-95-9, MZ-J 7-118
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GHRH antagonist MZ-J-7-118 alone or in combination with RC-3940-II markedly inhibited tumor growth by suppressing expression of VEGF, bFGF, receptors of EGF/HER family in PC-3, DU-14 human

androgen-independent prostate cancer in nude mouse)
RN 845715-95-9 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

IT 845716-11-2, RC-J 29-18
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GHRH antagonist RC-J-29-18 alone or in combination significantly inhibited tumor growth by suppressing expression of VEGF, bFGF and receptors of EGF/HER family in PC-3 and DU-145 human androgen-independent prostate cancer into nude mouse)
RN 845716-11-2 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:158688 CAPLUS Full-text
DOCUMENT NUMBER: 142:261790
TITLE: Preparation of analogs of human growth hormone releasing hormone hGH-RH(1-29)NH2 having antagonistic activity for hGH-RH
INVENTOR(S): Schally, Andrew V.; Varga, Jozsef; Zarandi, Marta; Cai, Ren Zhi
PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005016953	A2	20050224	WO 2004-US24183	20040726
WO 2005016953	A3	20060209		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2004265280	A1	20050224	AU 2004-265280		20040726	
CA 2534436	A1	20050224	CA 2004-2534436		20040726	
EP 1651662	A2	20060503	EP 2004-757325		20040726	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR						
BR 2004013257	A	20061003	BR 2004-13257		20040726	
CN 1871020	A	20061129	CN 2004-80022286		20040726	
IN 2006KN00445	A	20070706	IN 2006-KN445		20060227	
NO 2006001060	A	20060503	NO 2006-1060		20060303	
US 2007042950	A1	20070222	US 2006-566776		20061002	<--
PRIORITY APPLN. INFO.:			US 2003-492706P	P	20030805	
			WO 2004-US24183	W	20040726	

OTHER SOURCE(S): MARPAT 142:261790

AB The invention relates to novel synthetic antagonistic analogs of hGH-RH(1-29)NH2 which inhibit the activity of endogenous hGH-RH on the pituitary GH-RH receptors and inhibit the proliferation of human cancers. The higher inhibitory potencies of the new analogs, as compared to previously described ones, results from replacement of various amino acids. Peptides R1-A0-A1-A2-Asp-Ala-A5-A6-Thr-A8-A9-A10-A11-A12-Val-Leu- A15-A16-Leu-Ser-A19-A20-A21-A22-Leu-Gln-Asp-Ile-A27-A28-A29-A30-R2 [R1 is phenylacetyl, hydrocinnamoyl, des-amino-tyrosyl, indole-3-acetyl or -propionyl, 1- or 2-naphthylacetyl, 2-naphthylpropionyl, isobutyryl, Me(CH2)2-20CO or HO2C(CH2)2-20CO or any other aliphatic carboxyl group of 2-30 carbon atoms and any carbocyclic or heterocyclic aromatic carboxyl group of 3-8 carbon atoms containing at least one atom S, N and O in the heterocyclic ring; A0-A30 are amino residues (defined for each A); A0 may also be a C-N single bond and A30 may also be a C-N or C-O single bond; R2 is NH2, NHNH2, NHOH, NHR3, NR3R4, OH or -OR3, where R3 and R4 are alkyl, alkenyl, alkynyl, phenylalkyl, Ph or CHPh2 (with provisos)] or their pharmaceutically acceptable salts are claimed. Thus, [HO2C(CH2)12CO-Tyr1, D-Arg2, Phe(pCl)6, Arg9, Abu15, Nle27, D-Arg28, Har29]hGH-RH(1-29)NH2 (Har is homoarginine), prepared by the solid-phase method, showed a much increased and protracted inhibitory effect on GH-RH-elicited GH release in vitro (compared to the standard antagonist) and a substantial increase in binding affinity to the GH-RH receptor isoforms on PC-3 tumor membranes (compared to the binding affinity of reference compds.).

IT 845715-10-8P 845715-11-9P 845715-12-0P
845715-13-1P 845715-14-2P 845715-15-3P
845715-16-4P 845715-17-5P 845715-18-6P
845715-19-7P 845715-20-0P 845715-21-1P
845715-22-2P 845715-23-3P 845715-24-4P
845715-25-5P 845715-26-6P 845715-27-7P
845715-28-8P 845715-29-9P 845715-30-2P
845715-31-3P 845715-32-4P 845715-33-5P
845715-34-6P 845715-35-7P 845715-36-8P
845715-37-9P 845715-38-0P 845715-39-1P
845715-40-4P 845715-41-5P 845715-42-6P
845715-43-7P 845715-44-8P 845715-45-9P
845715-46-0P 845715-47-1P 845715-52-8P
845715-53-9P 845715-54-0P 845715-55-1P

845715-56-2P 845715-57-3P 845715-58-4P
845715-59-5P 845715-62-0P 845715-63-1P
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845715-81-3P 845715-82-4P 845715-83-5P
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845715-87-9P 845715-88-0P 845715-89-1P
845715-90-4P 845715-91-5P 845715-92-6P
845715-93-7P 845715-94-8P 845715-95-9P
845715-96-0P 845715-97-1P 845715-98-2P
845715-99-3P 845716-00-9P 845716-01-0P
845716-02-1P 845716-03-2P 845716-05-4P
845716-06-5P 845716-07-6P 845716-08-7P
845716-09-8P 845716-10-1P 845716-11-2P
845716-12-3P 845716-13-4P 845716-14-5P
845716-15-6P 845716-16-7P 845716-17-8P
845716-18-9P 845716-19-0P 845716-20-3P
845716-21-4P 845716-22-5P 845716-23-6P
845716-24-7P 845716-25-8P 845716-26-9P
845716-27-0P 845716-28-1P 845716-29-2P
845716-30-5P 845716-31-6P 845716-32-7P
845716-33-8P 845716-34-9P 845716-35-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of analogs of human growth hormone releasing hormone hGH-RH(1-29)NH2 having antagonistic activity for hGH-RH)

RN 845715-10-8 CAPLUS

CN L-Lysinamide, N-(1-oxohexyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-11-9 CAPLUS

CN L-Lysinamide, N-(5-carboxy-1-oxopentyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-12-0 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-

arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-13-1 CAPLUS

CN L-Lysinamide, N-(7-carboxy-1-oxoheptyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-14-2 CAPLUS

CN L-Lysinamide, N-(1-oxodecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-15-3 CAPLUS

CN L-Lysinamide, N-(9-carboxy-1-oxononyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-16-4 CAPLUS

CN L-Lysinamide, N-(1-oxododecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-

(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-17-5 CAPLUS

CN L-Lysinamide, N-(11-carboxy-1-oxoundecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-18-6 CAPLUS

CN L-Lysinamide, N-(1-oxotetradecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-19-7 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-20-0 CAPLUS

CN L-Lysinamide, N-(1-oxohexadecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-21-1 CAPLUS
CN L-Lysinamide, N-(15-carboxy-1-oxopentadecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-22-2 CAPLUS
CN D-Argininamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXXR

RN 845715-23-3 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXXR

RN 845715-24-4 CAPLUS
CN L-Lysinamide, N-(1-oxohexadecyl)-L-phenylalanyl-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 FYRDAIFTNR YRKVLXQLSA RKLLQDIXRX

RN 845715-25-5 CAPLUS
CN L-Lysinamide, N-(1-oxohexadecyl)-D-phenylalanyl-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 FYRDAIFTNR YRKVLXQLSA RKLLQDIXRX

RN 845715-26-6 CAPLUS
CN L-Lysinamide, N2-(phenylacetyl)-L-arginyl-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 RYRDAIFTNR YRKVLXQLSA RKLLQDIXRX

RN 845715-27-7 CAPLUS
CN L-Lysinamide, N2-(phenylacetyl)-D-arginyl-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 RYRDAIFTNR YRKVLXQLSA RKLLQDIXRX

RN 845715-28-8 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXRY RKVLXQLSAR KLLQDIXRX

RN 845715-29-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-N5-(aminocarbonyl)-L-ornithyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXXY RKVLXQLSAR KLLQDIXRX

RN 845715-30-2 CAPLUS

CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXRY RKVLXQLSAR KLLQDIXXR

RN 845715-31-3 CAPLUS

CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-N5-(aminocarbonyl)-L-ornithyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXXY RKVLXQLSAR KLLQDIXXR

RN 845715-32-4 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-N5-(aminocarbonyl)-L-ornithyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXXY RKVLXQLSAR KLLQDIXRX

RN 845715-33-5 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-D-alanyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTARY RKVLXQLSAR KLLQDIXRX

RN 845715-34-6 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXRY RKVLXQLSAR KLLQDIXRX

RN 845715-35-7 CAPLUS

CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-N5-(aminocarbonyl)-L-ornithyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXXY RKVLXQLSAR KLLQDIXXR

RN 845715-36-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-arginyl-4-(aminoiminomethyl)-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXRF RKVLXQLSAR KLLQDIXRX

RN 845715-37-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-

N6-(aminoiminomethyl)-L-lysyl-4-(aminoiminomethyl)-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXXF RKVLXQLSAR KLLQDIXRX

RN 845715-38-0 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-histidyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRH RKVLXQLSAR KLLQDIXRX

RN 845715-39-1 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-3-cyclohexyl-L-alanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRX RKVLXQLSAR KLLQDIXRX

RN 845715-40-4 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-(3S)-2,3,4,9-tetrahydro-1H-pyrido[3,4-b]indole-3-carbonyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXX RKVLXQLSAR KLLQDIXRX

RN 845715-41-5 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-3-(2-naphthalenyl)-L-alanyl-L-arginyl-L-lysyl-L-

valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXX RKVLXQLSAR KLLQDIXRX

RN 845715-42-6 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-β-phenyl-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXF RKVLXQLSAR KLLQDIXRX

RN 845715-43-7 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-4-amino-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXF RKVLXQLSAR KLLQDIXRX

RN 845715-44-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-L-tryptophyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXW RKVLXQLSAR KLLQDIXRX

RN 845715-45-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-4-nitro-L-phenylalanyl-L-arginyl-L-lysyl-L-

valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXF RKVLXQLSAR KLLQDIXRX

RN 845715-46-0 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-3-(3-pyridinyl)-L-alanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXA RKVLXQLSAR KLLQDIXRX

RN 845715-47-1 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-ethyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-52-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-L-tyrosyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-4-benzoyl-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIYTNXF RKVLXQLSAR KLLQDIXRX

RN 845715-53-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-

arginyl-L-tyrosyl-L-arginyl-N6-(aminoiminomethyl)-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RXVLXQLSAR KLLQDIXRX

RN 845715-54-0 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-55-1 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-56-2 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-57-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-

L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRX

RN 845715-58-4 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-2-methylalanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-59-5 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RXVLXQLSAR KLLQDIXRX

RN 845715-62-0 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-L-lysyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRXX

RN 845715-63-1 CAPLUS

CN L-Lysinamide, N-[3-(4-hydroxyphenyl)-1-oxopropyl]-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-

L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-L-lysyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRXX

RN 845715-72-2 CAPLUS

CN L-Lysinamide, N-[3-(1H-indol-3-yl)-1-oxopropyl]-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-L-lysyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRXX

RN 845715-73-3 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-L-lysyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRXX

RN 845715-74-4 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRRX

RN 845715-75-5 CAPLUS

CN D-Argininamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-

lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-L-lysyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRXR

RN 845715-76-6 CAPLUS

CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-[4-[(aminoiminomethyl)amino]butyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-77-7 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-[4-[(aminoiminomethyl)amino]butyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXRX

RN 845715-78-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY HKVLXQLSAR KLLQDIXRX

RN 845715-79-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-

(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-N6-(aminoiminomethyl)-L-lysyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY XKVLXQLSAR KLLQDIXRX

RN 845715-80-2 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-4-(aminoiminomethyl)-L-phenylalanyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY FKVLXQLSAR KLLQDIXRX

RN 845715-81-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-N5-(aminocarbonyl)-L-ornithyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY XKVLXQLSAR KLLQDIXRX

RN 845715-82-4 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY RKVLXQLSAR KLLQDIXRX

RN 845715-83-5 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-

alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY RKVLXQLSAR KLLQDIXRX

RN 845715-84-6 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-histidyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNHY RKVLXQLSAR KLLQDIXRX

RN 845715-85-7 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY RKVLXQLSAR KLLQDIXRX

RN 845715-86-8 CAPLUS

CN L-Lysinamide, N-(9-carboxy-1-oxononyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY RKVLXQLSAR KLLQDIXRX

RN 845715-87-9 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-

aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY RKVLXQLSAR KLLQDIXRX

RN 845715-88-0 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNFY HKVLXQLSAR KLLQDIXRX

RN 845715-89-1 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXFY HKVLXQLSAR KLLQDIXRX

RN 845715-90-4 CAPLUS

CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXFY HKVLXQLSAR KLLQDIXRX

RN 845715-91-5 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXFY HKVLXQLSAR KLLQDIXRX

RN 845715-92-6 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-4-(aminoiminomethyl)-L-phenylalanyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXFY HKVLXQLSAR KLLQDIXRX

RN 845715-93-7 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXFY HKVLXQLSAR KLLQDIXRX

RN 845715-94-8 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-N5-(aminocarbonyl)-L-ornithyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTXHY HKVLXQLSAR KLLQDIXRX

RN 845715-95-9 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845715-96-0 CAPLUS

CN L-Lysinamide, N-(9-carboxy-1-oxononyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845715-97-1 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845715-98-2 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAH KLLQDIXRX

RN 845715-99-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-

(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY HKVLXQLSAH KLLQDIXRX

RN 845716-00-9 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAH KLLQDIXRX

RN 845716-01-0 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFY HKVLXQLSAH KLLQDIXRX

RN 845716-02-1 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAH KLLQDIXRX

RN 845716-03-2 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-

valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFY HKVLXQLSAH KLLQDIXRX

RN 845716-05-4 CAPLUS

CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY RKVLXQLSAR KLLQDIXRX

RN 845716-06-5 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNHY HKVLXQLSAR KLLQDIXRX

RN 845716-07-6 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-N5-(aminocarbonyl)-L-ornithyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY RKVLXQLSAR KLLQDIXRX

RN 845716-08-7 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-L-histidyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-

(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLHQLSAH KLLQDIXRX

RN 845716-09-8 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAR XLLQDIXRX

RN 845716-10-1 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAH XLLQDIXRX

RN 845716-11-2 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845716-12-3 CAPLUS
CN L-Lysinamide, N-(1-oxodecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845716-13-4 CAPLUS
CN L-Lysinamide, N-(1-oxododecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845716-14-5 CAPLUS
CN L-Lysinamide, N-(1-oxo-3-phenylpropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845716-15-6 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-methyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HKVLXQLSAR KLLQDIXRX

RN 845716-16-7 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAH XLLQDIXRX

RN 845716-17-8 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFY HXVLXQLSAH XLLQDIXRX

RN 845716-18-9 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-19-0 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-20-3 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAH XLLQDIXRX

RN 845716-21-4 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFY HXVLXQLSAH XLLQDIXRX

RN 845716-22-5 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-23-6 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-24-7 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAH XLLQDIXRX

RN 845716-25-8 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-26-9 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-27-0 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFY HXVLXQLSAH XLLQDIXRX

RN 845716-28-1 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-29-2 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHF HXVLXQLSAH XLLQDIXRX

RN 845716-30-5 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-31-6 CAPLUS

CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-32-7 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-33-8 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-34-9 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-β-phenyl-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

RN 845716-35-0 CAPLUS
CN L-Lysinamide, N-(13-carboxy-1-oxotridecyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-4-(aminoiminomethyl)-L-phenylalanyl-4-nitro-L-phenylalanyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)-N-ethyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAFF HXVLXQLSAH XLLQDIXRX

PEPTIDE 96

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L11 5 SEA FILE=REGISTRY ABB=ON YRDA[IV]FTAHYH'ORN'VL'ABU'[QR]LS[A'ABU']H'ORN'[LA'AIB']LQDI'NLE'R'HAR'/SQSP

=> fil capl; d que l15
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FILE LAST UPDATED: 19 Sep 2007 (20070919/ED)

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L11 5 SEA FILE=REGISTRY ABB=ON YRDA[IV]FTAHYH'ORN'VL'ABU'[QR]LS[A'AB U']H'ORN'[LA'AIB']LQDI'NLE'R'HAR'/SQSP
L15 3 SEA FILE=CAPLUS ABB=ON L11

=> s l15 not l19
L21 2 L15 NOT L19

=> d ibib abs hitseq l21 1-2; s l15 and l19; d scan ti

L21 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1073431 CAPLUS Full-text
DOCUMENT NUMBER: 146:54737
TITLE: Synergistic inhibition of growth of lung carcinomas by antagonists of growth hormone-releasing hormone in combination with docetaxel
AUTHOR(S): Hohla, Florian; Schally, Andrew V.; Szepeshazi, Karoly; Varga, Jozsef L.; Buchholz, Stefan; Koester, Frank; Heinrich, Elmar; Halmos, Gabor; Rick, Fernc G.; Kannadka, Chandrika; Datz, Christian; Kanashiro, Celia A.
CORPORATE SOURCE: Veterans Affairs med. Cent. and Dep. Med., Tulane Univ. Sch. Med., New Orleans, LA, 70112, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2006), 103(39), 14513-14519
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We investigated the effect of antagonists of growth hormone-releasing hormone (GHRH) MZ-J-7-138 and JV-1-92 on H460 human non-small cell lung carcinoma (NSCLC) xenografted orthotropically into nude mice. Treatment with MZ-J-7-138 or JV-1-92 inhibited orthotropic growth of H460 NSCLC by 52-65% ($P < 0.001$) and was associated with a significant decrease in protein expression of K-Ras, cyclooxygenase-2 (Cox-2) and phospho-Akt (pAkt). In other expts., treatment with MZ-J-7-138 or docetaxel reduced tumor volume of s.c. xenografted H460 human NSCLC by 30-36% ($P < 0.01$). The combination of MZ-J-7-138 and docetaxel resulted in a synergistic growth inhibition of H460 NSCLC xenografts of 63%. MZ-J-7-138 alone or in combination with docetaxel significantly reduced protein levels of K-Ras, Cox-2, and pAkt by 56-63%. Docetaxel given singly diminished the protein levels only of Cox-2 and did not affect K-Ras and pAkt. High-affinity binding sites, mRNA, and protein expression of pituitary GHRH receptors and its splice variant (SV) 1 were found in H460. H460 NSCLC cells contained GHRH peptide, and its growth was significantly inhibited in vitro by 10 /M MZ-J-7-138 ($P < 0.001$). Serum insulin-like growth factor 1 (IGF1) was not reduced by either GHRH antagonists. These findings suggest that antiproliferative effects of GHRH antagonists in H460 NSCLC are associated with down-regulation of K-Ras, Cox-2, and pAkt. In conclusion, GHRH antagonists in combination with docetaxel synergistically inhibit growth of H460 NSCLC and the expression of K-ras, Cox-2, and pAkt, which might abrogate the signal transduction pathways for cell growth stimulation and therapeutic resistance.
IT 865994-98-5, MZ-J-7-138
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic inhibition of growth of lung carcinomas by antagonists of growth hormone-releasing hormone in combination with docetaxel)
RN 865994-98-5 CAPLUS
CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-

O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY(HX)VLXQLSAH XLLQDIXRX

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:700187 CAPLUS Full-text
DOCUMENT NUMBER: 143:339823
TITLE: Effective treatment of experimental human non-Hodgkin's lymphomas with antagonists of growth hormone-releasing hormone
AUTHOR(S): Keller, Gunhild; Schally, Andrew V.; Groot, Kate; Toller, Gabor L.; Havt, Alexandre; Koester, Frank; Armatis, Patricia; Halmos, Gabor; Zarandi, Marta; Varga, Jozsef L.; Engel, Joerg B.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, Tulane University School of Medicine, New Orleans, LA, 70112, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2005), 102(30), 10628-10633
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antagonists of growth hormone-releasing hormone (GHRH) were shown to inhibit the growth of various cancers. We investigated the antitumor activity and the mechanism of action of GHRH antagonists in human non-Hodgkin's lymphomas (NHL). Nude mice bearing xenografts of RL and HT human NHL were treated with GHRH antagonists MZ-5-156 and MZ-J-7-138 at a dose of 40 μg twice daily. The concns. of serum IGF-1 and GHRH, bFGF, and VEGF in tumor tissue were measured by RIAs. Expression of GHRH and splice variant 1 of the GHRH receptor in both cell lines was examined by RT-PCR. The effects of MZ-5-156, MZ-J-7-138 and GHRH on cell proliferation were evaluated in vitro. Treatment with MZ-5-156 and MZ-J-7-138 significantly ($P < 0.05$) inhibited the growth of RL and HT tumors by 59.9-73.9%. High-affinity binding sites for GHRH and mRNA for GHRH and splice variant-1 of the GHRH receptors were found on RL and HT tumors. RL and HT cells contained GHRH peptide, and their growth in vitro was significantly inhibited by both antagonists. IGF-I levels in serum of mice were significantly decreased by antagonist MZ-5-156. Therapy with GHRH antagonists also significantly reduced tumoral bFGF, whereas VEGF levels were not suppressed. Our findings suggest that GHRH antagonists inhibit the growth of RL and HT lymphomas by direct effects mediated by tumoral receptors for GHRH. GHRH antagonists could offer a new therapeutic modality for the management of advanced NHL.
IT 865994-98-5, MZ-J-7-138
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effective treatment of exptl. human non-Hodgkin's lymphomas with GHRH antagonists, MZ-5-156 and MZ-J-7-138)
RN 865994-98-5 CAPLUS

CN L-Lysinamide, N-(1-oxooctyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-alanyl-L-histidyl-O-ethyl-L-tyrosyl-L-histidyl-L-ornithyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-histidyl-L-ornithyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTAHY HXVLXQLSAH XLLQDIXRX

REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 1 L15 AND L19

L22 1 ANSWERS CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of analogs of human growth hormone releasing hormone hGH-RH(1-29)NH2 having antagonistic activity for hGH-RH

this reference was printed in full with the inventor search

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L9 227 SEA FILE=REGISTRY ABB=ON [YH][R'CIT']DA[IV][FY'NAL']T[N'CIT'QSTA'ABU''AIB']...[K'ORN''HAR''CIT''NLE'A]VL[GA'ABU''AIB''NLE'Q'CIT'H][QR]LS[A'ABU'][HR'CIT'][K'ORN''CIT'][LA'AIB']LQDI[ML'NLE''ABU'R][R'HAR'SNDA'ABU''CIT']./SQSP

=> fil capl; d que l16
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FILE LAST UPDATED: 19 Sep 2007 (20070919/ED)

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L9          227 SEA FILE=REGISTRY ABB=ON  [YH][R'CIT']DA[IV][FY'NAL']T[N'CIT'QS
                TA'ABU''AIB']...[K'ORN''HAR''CIT''NLE'A]VL[GA'ABU''AIB''NLE'Q'C
                IT'H][QR]LS[A'ABU'][HR'CIT'][K'ORN''CIT'][LA'AIB']LQDI[ML'NLE''
                ABU'R][R'HAR'SNDA'ABU''CIT'].SQSP
L14          73 SEA FILE=CAPLUS ABB=ON  L9
L16          49 SEA FILE=CAPLUS ABB=ON  L14 AND (PY<2003 OR AY<2003 OR
                PRY<2003)


=> s l16 not l19,l15
L23          49 L16 NOT (L19 OR L15)

=> => d ibib abs hitseq 123 1-49; fil hom

L23  ANSWER 1 OF 49  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2003:509747  CAPLUS  Full-text
DOCUMENT NUMBER:          140:219
TITLE:                    Growth hormone-releasing hormone antagonists
                          containing lactam bridge constraints
AUTHOR(S):                Zarandi, Marta; Schally, Andrew V.; Kovacs, Magdolna;
                          Horvath, Judit E.; Toth, Katalin; Varga, Jozsef; Kele,
                          Zoltan
CORPORATE SOURCE:         Endocrine, Polypeptide and Cancer Institute,
                          Department of Medicine, Tulane University, New
                          Orleans, LA, USA
SOURCE:                   Peptides 2000, Proceedings of the European Peptide
                          Symposium, 26th, Montpellier, France, Sept. 10-15,
                          2000 (2001), Meeting Date 2000, 781-782.
                          Editor(s): Martinez, Jean; Fehrentz, Jean-Alain.
                          Editions EDK: Paris, Fr.
                          CODEN: 69EDWK; ISBN: 2-84254-048-4
DOCUMENT TYPE:            Conference
LANGUAGE:                 English
AB    The results of recent oncol. studies suggest a possible application of
      antagonists of human growth hormone-releasing hormone (hGH-RH) in the
      treatment of various human cancers.  Previously, we reported the synthesis of
      various antagonists of GH-RH with high and protracted in vitro and in vivo
      activities.  Based on the fact that i-(i+4) lactam bridge enhances the
      helicity of the central region of GH-RH, 10 new antagonistic analogs were
      synthesized in order to evaluate the influence of a lactam bridge constraint
      on the in vitro inhibiting potencies of hGH-RH antagonists.
IT    628316-44-9P
      RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
         (growth hormone-releasing hormone antagonists containing lactam bridge
         constraints)
RN    628316-44-9  CAPLUS
CN    L-Ornithinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-
      alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-
      L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-
      L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-
      D-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-, (25→29)-lactam
      (9CI)  (CA INDEX NAME)

NTE   modified (modifications unspecified)

SEQ      1 YRDAIFTXSY RKVLAQLSAR KLLQDIXSX
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Absolute stereochemistry.

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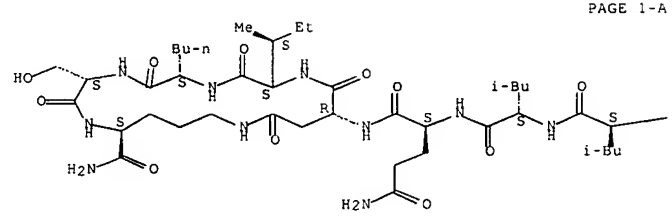

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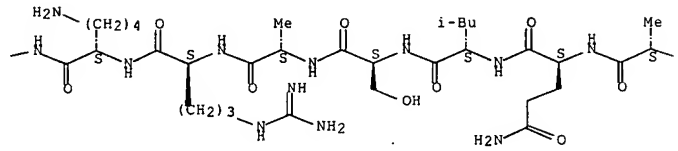

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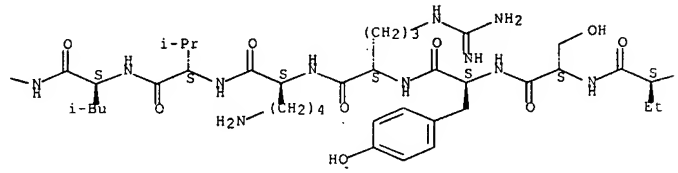

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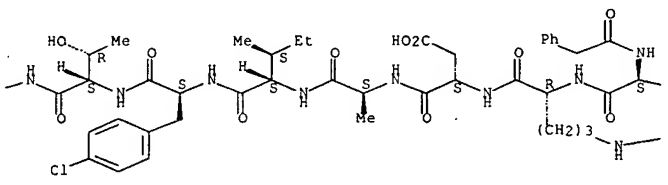

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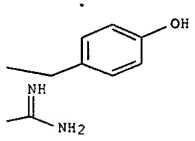

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:932781 CAPLUS Full-text
DOCUMENT NUMBER: 138:198983
TITLE: Inhibitory effects of antagonistic analogs of GHRH on GH3 pituitary cells overexpressing the human GHRH receptor
AUTHOR(S): Kovacs, M.; Schally, A. V.; Lee, E.-J.; Busto, R.; Armatis, P.; Groot, K.; Varga, J. L.
CORPORATE SOURCE: Endocrine, Polypeptide, Veterans Affairs Medical Center, New Orleans, LA, 70112, USA
SOURCE: Journal of Endocrinology (2002), 175(2), 425-434
CODEN: JOENAK; ISSN: 0022-0795
PUBLISHER: Society for Endocrinology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB GH3 rat pituitary tumor cells produce GH and prolactin (PRL), but lack the GHRH receptor (GHRH-R). The authors expressed human GHRH-R (hGHRH-R) in GH3 cells using recombinant adenoviral vectors and studied the effects of GHRH antagonists. The mRNA expression of the GHRH-R gene in the cells was demonstrated by RT-PCR. An exposure of the GH3 cells infected with hGHRH-R to 10-10, 10-9 and 10-8 M hGHRH for 1 or 2 h in culture caused a dose-dependent elevation of the intracellular cAMP concentration and the cAMP efflux. Exposure to hGHRH also elicited dose-dependent increases in GH and PRL secretion from these cells. Neither the uninfected nor the antisense hGHRH-R-infected control cells exhibited cAMP, GH and PRL responses to GHRH

stimulation. GHRH antagonists JV-1-38 and JV-1-36 applied at 3 + 10-8 M for 3 h, together with 10-9 M GHRH, significantly inhibited the GHRH-stimulated cAMP efflux from the hGHRH-R-infected cells by 36 and 80% resp. The more potent antagonist JV-1-36 also decreased the intracellular cAMP levels in these cells by 55%. Exposure to JV-1-36 for 1 h nullified the stimulatory effect of GHRH on GH secretion and significantly inhibited it by 64 and 77% after 2 and 3 h resp. In a superfusion system, GHRH at 10-10, 10-9 and 10-8 M concns. induced prompt and dose-related high cAMP responses and smaller increases in the spontaneous GH secretion of the hGHRH-R-infected cells. Antagonists JV-1-36 and JV-1-38 applied at 3 + 10-8 M for 15 min, together with 10-9 M GHRH, inhibited the GHRH-stimulated cAMP response by 59 and 35% resp. This work demonstrates that GHRH antagonists can effectively inhibit the actions of GHRH on the hGHRH-R. The authors' results support the view that this class of compds. would be active clin.

IT 221377-79-3, JV-1-36 305322-14-9, JV-1-38
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(somatoliberin antagonist analogs receptor binding and inhibition of GH, prolactin and cAMP response to somatoliberin in GH3 pituitary cells overexpressing human GHRH receptor)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:851683 CAPLUS Full-text
DOCUMENT NUMBER: 138:117932
TITLE: Inhibition of proliferation in human MNNG/HOS osteosarcoma and SK-ES-1 Ewing sarcoma cell lines in vitro and in vivo by antagonists of growth hormone-releasing hormone: effects on insulin-like

growth factor II

AUTHOR(S): Braczkowski, Ryszard; Schally, Andrew V.; Plonowski, Artur; Varga, Jozsef L.; Groot, Kate; Krupa, Magdalena; Armatis, Patricia

CORPORATE SOURCE: Endocrine, Polypeptide, and Cancer Institute, Veterans Affairs Medical Center, New Orleans, LA, USA

SOURCE: Cancer (New York, NY, United States) (2002), 95(8), 1735-1745
CODEN: CANCAR; ISSN: 0008-543X

PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone-releasing hormone (GH-RH) can inhibit the proliferation of various tumors either indirectly through the suppression of the pituitary growth hormone/hepatic insulin-like growth factor I (IGF-I) axis and the lowering of serum IGF-I concentration or directly by reducing the levels of IGF-I and IGF-II and their mRNA expression in tumors and blocking the effect of autocrine GH-RH. In this study, the authors investigated the effects of the GH-RH antagonist JV-1-38 on MNNG/HOS human osteosarcoma and SK-ES-1 human Ewing sarcoma cell lines. Male nude mice bearing s.c. xenografts of MNNG/HOS or SK-ES-1 tumors were treated s.c. with JV-1-38 at a dose of 20 μg twice daily for 4 wk. The concns. of IGF-I and IGF-II in serum and in tumor tissue were measured by RIA. Tumor and liver levels of mRNA for IGF-I and IGF-II were determined by reverse transcriptase-polymerase chain reaction anal. The effects of JV-1-38, IGF-I, and IGF-II on cell proliferation in vitro were evaluated. GH-RH antagonist significantly inhibited the tumor volume and tumor weight of MNNG/HOS and SK-ES-1 tumors by >50% after 4 wk and increased tumor doubling time. JV-1-38 lowered the serum IGF-I level, decreased the expression of mRNA for IGF-I in the liver, and significantly reduced the concentration of IGF-II and mRNA levels for IGF-II in both sarcomas. The concentration of IGF-I was lowered only in SK-ES-1 tumors. In vitro, the proliferation of SK-ES-1 and MNNG/HOS cells was inhibited by JV-1-38 and by antisera to IGF-I and IGF-II. Thus, the inhibition of MNNG/HOS osteosarcoma and SK-ES-1 Ewing sarcoma by GH-RH antagonists was linked to a suppression of IGF-II production in tumors. However, in SK-ES-1 tumors, the effects on IGF-I also may be involved.

IT 305322-14-9, JV-1-38
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(growth hormone-releasing hormone antagonist inhibition of proliferation in human MNNG/HOS osteosarcoma and SK-ES-1 Ewing sarcoma cell lines and involvement of IGF)

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:711966 CAPLUS Full-text
DOCUMENT NUMBER: 137:367564

TITLE: The expression of growth hormone-releasing hormone (GHRH) and splice variants of its receptor in human gastroenteropancreatic carcinomas

AUTHOR(S): Busto, Rebeca; Schally, Andrew V.; Varga, Jozsef L.; Garcia-Fernandez, M. Olga; Groot, Kate; Armatis, Patricia; Szepeshazi, Karoly

CORPORATE SOURCE: Endocrine, Polypeptide, Institute, Veterans Affairs Medical Center, and Section of Experimental Medicine, Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70112, USA

SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2002), 99(18), 11866-11871
CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Splice variants (SVs) of receptors for growth hormone-releasing hormone (GHRH) have been found in primary human prostate cancers and diverse human cancer cell lines. GHRH antagonists inhibit growth of various exptl. human cancers, including pancreatic and colorectal, xenografted into nude mice or cultured in vitro, and their antiproliferative action could be mediated in part through SVs of GHRH receptors. In this study we examined the expression of mRNA for GHRH and for SVs of its receptors in tumors of human pancreatic, colorectal, and gastric cancer cell lines grown in nude mice. MRNA for both GHRH and SV1 isoform of GHRH receptors was expressed in tumors of pancreatic (SW1990, PANC-1, MIA PaCa-2, Capan-1, Capan-2, and CFPAC1), colonic (COLO 320DM and HT-29), and gastric (NCI-N87, HS746T, and AGS) cancer cell lines; mRNA for SV2 was also present in Capan-1, Capan-2, CFPAC1, HT-29, and NCI-N87 tumors. In proliferation studies in vitro, the growth of pancreatic, colonic, and gastric cancer cells was stimulated by GHRH(1-29)NH2 and inhibited by GHRH antagonist JV-1-38. The stimulation of some gastroenteropancreatic cancer cells by GHRH was followed by an increase in cAMP production, and GHRH antagonist JV-1-38 competitively inhibited this effect. Our study indicates the presence of an autocrine/paracrine stimulatory loop based on GHRH and SV1 of GHRH receptors in human pancreatic, colorectal, and gastric cancers. The finding of SV1 receptor in human cancers provides an approach to an antitumor therapy based on the blockade of this receptor by specific GHRH antagonists.

IT 305322-14-9, JV 1-38
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(GHRH antagonist; SV1 receptor in human cancers provides an approach to an antitumor therapy based on the blockade of this receptor by specific GHRH antagonists)

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:641970 CAPLUS Full-text
DOCUMENT NUMBER: 137:363625
TITLE: Inhibition of proliferation of PC-3 human prostate cancer by antagonists of growth hormone-releasing hormone: lack of correlation with the levels of serum IGF-I and expression of tumoral IGF-II and vascular endothelial growth factor
AUTHOR(S): Plonowski, Artur; Schally, Andrew V.; Letsch, Markus; Krupa, Magdalena; Hebert, Francine; Busto, Rebeca; Groot, Kate; Varga, Jozsef L.
CORPORATE SOURCE: Veterans Affairs Medical Center, Endocrine, Polypeptide, and Cancer Institute, New Orleans, LA, USA
SOURCE: Prostate (New York, NY, United States) (2002), 52(3), 173-182
CODEN: PRSTDS; ISSN: 0270-4137
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone-releasing hormone (GHRH) such as JV-1-38 can inhibit androgen-independent prostate cancer directly by several mechanisms and/or indirectly by suppressing the GH/IGF-I axis. To shed more light on the mechanisms involved, the effects of JV-1-38 on PC-3 human prostate cancer were compared with those of somatostatin analog RC-160 in vivo and in vitro. Nude mice bearing PC-3 tumors received JV-1-38 (20 μg), RC-160 (50 μg) or a combination of JV-1-38 and RC-160. The concentration of IGF-I in serum and the expression of mRNA for IGF-II and VEGF in tumor tissue were investigated. In vivo, the final volume of PC-3 tumors treated with JV-1-38 was significantly lowered by 49%, whereas RC-160 exerted only 30% inhibition compared with controls. Combined use of both compds. augmented tumor inhibition to 63%. Serum IGF-I levels were decreased only in mice treated with RC-160. JV-1-38 suppressed mRNA for IGF-II in PC-3 tumors by 42%, whereas RC-160 alone or in combination with JV-1-38 caused a 65% reduction JV-1-38 and RC-160 used as single drugs decreased the expression of VEGF by 50%, and their combination caused a 63% reduction In vitro, JV-1-38 inhibited the proliferation of PC-3 cells by 39%. This effect could be partially reversed by addition of IGF-I to the serum-free medium. RC-160 alone did not affect the PC-3 cell growth in vitro, but in combination with JV-1-38 it augmented the antiproliferative effect of the GH-RH antagonist to 72%. Exposure to JV-1-38 in vitro reduced the expression of mRNA for IGF-II in PC-3 cells by 55% but did not change VEGF mRNA levels, whereas RC-160 had no effect.

IT 305322-14-9, JV-1-38
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GH-RH antagonist inhibition of proliferation of PC-3 human prostate cancer in relation to levels of serum IGF-I and expression of tumoral IGF-II and VEGF)

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:52439 CAPLUS Full-text
DOCUMENT NUMBER: 136:210843
TITLE: Expression of a splice variant of the receptor for GHRH in 3T3 fibroblasts activates cell proliferation responses to GHRH analogs
AUTHOR(S): Kiaris, Hippokratis; Schally, Andrew V.; Busto, Rebeca; Halmos, Gabor; Artavanis-Tsakonas, Spyros; Varga, Jozsef L.
CORPORATE SOURCE: Harvard Medical School, Massachusetts General Hospital Cancer Center, Charlestown, MA, 02129, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2002), 99(1), 196-200
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The stimulatory effects of growth hormone-releasing hormone (GHRH) and the antiproliferative action of GHRH antagonists have been demonstrated in various cancers, but the receptors that mediate.these responses are not clearly identified. Recently, we reported that human cancer cell lines express splice variants (SVs) of the receptors for GHRH. SV1 exhibits the greatest similarity to the pituitary GHRH receptor and is most likely to be functional. To ascertain whether SV1 mediates mitogenic effects on nonpituitary tissues, we expressed SV1 in 3T3 mouse fibroblasts and studied the properties of the transfected cells. Radioligand binding assays with 125I-labeled GHRH antagonist JV-1-42 detected high affinity (Kd = 0.58 nM) binding sites for GHRH with a maximal binding capacity (Bmax) of 103 fmol/mg of membrane protein in 3T3 cells transfected with pcDNA3-SV1, whereas the control cells transfected with the empty vector did not show any GHRH binding. Cell proliferation studies showed that cells expressing SV1 are much more sensitive to GHRH analogs than the pcDNA3 controls. Thus, the expression of SV1 augments the stimulatory responses to GHRH(1-29)NH2 or GHRH agonist JI-38 and inhibitory responses to GHRH antagonist JV-1-38 as compared with pcDNA3 controls. The stimulation of SV1-expressing cells by GHRH or JI-38 is followed by an increase in cAMP production, but no GH release occurs. Vasoactive intestinal peptide had no effect, and its antagonist JV-1-53 did not inhibit the proliferation of SV1-expressing cells stimulated by GHRH. Our results suggest that SV1 could mediate responses of nonpituitary cells and various tumors to GHRH and GHRH antagonists. The presence of SV1 in several human cancer cell lines provides a rationale for antitumor therapy based on the blockade of this receptor by specific GHRH antagonists.

IT 221377-58-8, JV-1-42 305322-14-9, JV 1-38
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(GHRH receptor splice variant expression in 3T3 fibroblasts activates cell proliferation responses to GHRH analogs)

RN 221377-58-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-

arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:846672 CAPLUS Full-text
DOCUMENT NUMBER: 136:144824
TITLE: Inhibition of growth and metastases of MDA-MB-435 human estrogen-independent breast cancers by an antagonist of growth hormone-releasing hormone
AUTHOR(S): Chatzistamou, Ioulia; Schally, Andrew V.; Varga, Jozsef L.; Groot, Kate; Busto, Rebeca; Armatis, Patricia; Halmos, Gabor
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, New Orleans, LA, 70112-1262, USA
SOURCE: Anti-Cancer Drugs (2001), 12(9), 761-768
CODEN: ANTDEV; ISSN: 0959-4973
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone-releasing hormone (GH-RH) inhibit the growth of various cancers by mechanism(s) that include the suppression of the insulin-like growth factors (IGF)-I and/or -II. In this study, nude mice bearing orthotopic implants of MDA-MB-435 human estrogen-independent breast carcinoma received 39 days of therapy with GH-RH antagonist JV-1-36 (20 μg/day). The treatment significantly inhibited tumor growth by 71.1% ($p<0.01$) and nullified the metastatic potential of MDA-MB-435 cells. Four of eight control mice (50%) developed metastases in the lymph nodes and one (12.5%) in the lung, but none of the animals receiving JV-1-36 showed metastatic spread. GH-RH antagonist JV-1-36 inhibited the growth of MDA-MB-435 cells in vitro, while IGF-I stimulated it. However, mRNA for IGF-I or -II was not detected in MDA-MB-435 cells, indicating that the suppression of autocrine IGFs may not be involved in the antiproliferative mechanism. Using ligand competition assays with 125I-labeled GH-RH antagonist JV-1-42, specific high-affinity binding sites

for GH-RH were found on tumor membranes. Reverse transcription-polymerase chain reaction revealed the expression of mRNA for GH-RH receptor splice variant-1 in MDA-MB-435 tumors. Our results suggest that the antitumorigenic action of GH-RH antagonists on MDA-MB-435 breast cancer could be direct and mediated by tumoral GH-RH receptors.

IT 221377-79-3, JV-1-36
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of growth and metastases of MDA-MB-435 human estrogen-independent breast cancers by GHRH antagonist)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:797556 CAPLUS Full-text
DOCUMENT NUMBER: 137:87934
TITLE: Inhibition of growth and reduction in tumorigenicity of UCI-107 ovarian cancer by antagonists of growth hormone-releasing hormone and vasoactive intestinal peptide
AUTHOR(S): Chatzistamou, Ioulia; Schally, Andrew V.; Varga, Jozsef L.; Groot, Kate; Armatis, Patricia; Bajo, Ana Maria
CORPORATE SOURCE: VA Medical Center, Endocrine, Polypeptide and Cancer Institute, New Orleans, LA, 70112-1262, USA
SOURCE: Journal of Cancer Research and Clinical Oncology (2001), 127(11), 645-652
CODEN: JCROD7; ISSN: 0171-5216
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The tumor inhibitory activities of antagonists of growth hormone-releasing hormone (GH-RH) and vasoactive intestinal peptide (VIP) were evaluated in UCI-107 human ovarian cancer model, and the role of the insulin-like growth factor (IGF) system in the response was investigated. In the present study we investigated the effects of GH-RH antagonist JV-1-36 and VIP antagonist JV-1-52, on the growth and tumorigenicity of UCI-107 ovarian cell carcinoma xenografted into nude mice. Studies on the effects of hGH-RH(1-29)NH2, IGF-I, IGF-II, JV-1-36, and JV-1-52 on the proliferation of UCI-107 cells cultured in vitro were also performed. After 22 days of therapy with JV-1-36 or JV-1-52 at the dose of 20 μg/day, the final volume of UCI-107 tumors was significantly ($P<0.05$) decreased by 50.5% and 56%, resp., compared to controls. The concentration of IGF-II in tumors was reduced by 66% in the JV-1-36-treated group and by 62% in the group given JV-1-52 (both $P<0.05$). Exposure in vitro

to 1 μM concns. of JV-1-36 or JV-1-52 for 24 h decreased the tumorigenicity of UCI-107 cells in nude mice. All ten mice injected with cells treated with medium alone developed tumors within 23 days after cell inoculation, while only eight of ten and four of ten mice injected with cells exposed to JV-1-36 or JV-1-52, resp., had tumors. In vitro exposure of UCI-107 cells to 5-35 ng/mL IGF-II produced a significant suppression in the rate of cell proliferation ($P<0.01$). Our results suggest that GH-RH and VIP antagonists inhibit the growth of UCI-107 ovarian cell carcinoma by mechanisms that appear to involve direct effects on the cancer cells.

IT 221377-79-3, JV-1-36
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of growth and reduction in tumorigenicity of UCI-107 ovarian cancer by antagonists of growth hormone-releasing hormone and vasoactive intestinal peptide)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:723866 CAPLUS Full-text
DOCUMENT NUMBER: 136:877
TITLE: Antagonists of GHRH decrease production of GH and IGF-I in MXT mouse mammary cancers and inhibit tumor growth
AUTHOR(S): Szepeshazi, Karoly; Schally, Andrew V.; Armatis, Patricia; Groot, Kate; Hebert, Francine; Feil, Anita; Varga, Jozsef L.; Halmos, Gabor
CORPORATE SOURCE: Veterans Affairs Medical Center, Endocrine, Polypeptide and Cancer Institute, New Orleans, LA, 70112, USA
SOURCE: Endocrinology (2001), 142(10), 4371-4378
CODEN: ENDOAO; ISSN: 0013-7227
PUBLISHER: Endocrine Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The involvement of IGF-I in mammary carcinogenesis is well established, but the role of GH, as an autocrine growth factor for breast cancers is poorly understood. The goal of the authors' study was to investigate whether antagonists of GHRH can interfere with the effects of GH and IGF-I in MXT mouse mammary cancers. GHRH antagonists JV-1-36 and JV-1-38 inhibited growth of estrogen-independent MXT mouse mammary cancers in vivo, producing about 50% reduction in tumor volume This growth inhibition was associated with a decrease in cell proliferation and an increase in apoptosis in MXT cancers. RIA and RT-PCR analyses showed that the concns. of GH and IGF-I and the levels

of mRNA for GH and IGF-I in MXT tumors were reduced by the therapy with GHRH antagonists. The mRNA for GH receptors was also decreased. In vitro, the proliferation of MXT cancer cells was strongly stimulated by GH and less effectively by IGF-I, indicating that both GH and IGF-I may act as growth factors for this mammary carcinoma. GHRH antagonist JV-1-38 inhibited the autonomous growth of MXT cells and the proliferation induced by IGF-I or GH and diminished 3H-thymidine- incorporation stimulated by IGF-I and GH. These findings and a sustained increase in cyclin B2 concns. in the cells shown by immunoblotting indicate that JV-1-38 causes a block at the end of the G2 phase of cell cycle. The authors' results demonstrate that GHRH antagonists decrease the local production of both GH and IGF-I in MXT mouse mammary cancers, the resulting growth inhibition being the consequence of reduced cell proliferation and increased apoptosis.

IT 221377-79-3, JV-1-36 305322-14-9, JV 1-38
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GHRH antagonists decrease production of GH and IGF-I in MXT mouse mammary cancers and inhibit tumor growth)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 10 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:407258 CAPLUS Full-text
DOCUMENT NUMBER: 135:266764
TITLE: Antiproliferative actions of growth hormone-releasing hormone antagonists on MiaPaCa-2 human pancreatic cancer cells involve cAMP independent pathways
AUTHOR(S): Rekasi, Z.; Varga, J. L.; Schally, A. V.; Plonowski, A.; Halmos, G.; Csernus, B.; Armatis, P.; Groot, K.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans

Affairs Medical Center, New Orleans, LA, 70112, USA
SOURCE: Peptides (New York, NY, United States) (2001), 22(6), 879-886
CODEN: PPTDD5; ISSN: 0196-9781
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We evaluated the effects of GHRH antagonists on the proliferation of MiaPaCa-2 human pancreatic cancer cells and cAMP signaling in vitro. GHRH antagonists inhibited the proliferation of MiaPaCa-2 cells in vitro in a dose-dependent way and caused a significant elevation in cAMP production In a superfusion system, short-term exposure of the cells to GHRH antagonists evoked an acute, dose-dependent release of cAMP into the medium. Native GHRH, which stimulates cAMP efflux from pituitary at nanomolar doses, did not influence cAMP release from cultured or superfused MiaPaCa-2 cells even at 10-30 μM. VIP, PACAP, secretin and glucagon also did not influence cell proliferation or cAMP production Adenylate cyclase activator forskolin (FSK) caused a greater cAMP response, but a smaller antiproliferative effect than GHRH antagonists. Combined treatment with FSK and GHRH antagonist JV-1-38 potentiated the cAMP-inducing effect of FSK, but did not produce a greater inhibition of cell proliferation than JV-1-38 alone. A selective accumulation of radiolabeled GHRH antagonist [125I]JV-1-42 in vivo in MiaPaCa-2 carcinoma xenografted into nude mice was also observed In conclusion, second messengers other than cAMP participate in the signal transduction pathways of GHRH analogs mediated by tumoral GHRH receptors.

IT 221377-57-7, MZ 6-55 221377-79-3, JV-1-36
305322-14-9, JV 1-38
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiproliferative actions of GHRH antagonists on MiaPaCa-2 human pancreatic cancer cells involve cAMP independent pathways)

RN 221377-57-7 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

IT 221377-58-8, JV-1-42
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(antiproliferative actions of GHRH antagonists on MiaPaCa-2 human pancreatic cancer cells involve cAMP independent pathways)

RN 221377-58-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 11 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:367559 CAPLUS Full-text
DOCUMENT NUMBER: 135:102703
TITLE: Antagonists of growth hormone-releasing hormone and somatostatin analog RC-160 inhibit the growth of the OV-1063 human epithelial ovarian cancer cell line xenografted into nude mice
AUTHOR(S): Chatzistamou, Ioulia; Schally, Andrew V.; Varga, Jozsef L.; Groot, Kate; Armatis, Patricia; Busto, Rebeca; Halmos, Gabor
CORPORATE SOURCE: Endocrine, Polypeptide, Veterans Affairs Medical Center, Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70112, USA
SOURCE: Journal of Clinical Endocrinology and Metabolism (2001), 86(5), 2144-2152
CODEN: JCEMAZ; ISSN: 0021-972X
PUBLISHER: Endocrine Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effects of antagonists of GHRH and the somatostatin analog RC-160 on the growth of OV-1063 human epithelial ovarian cancer cells xenografted into nude

mice were investigated. Treatment with 20 μg/day of the GHRH antagonist JV-1-36 or MZ-5-156 and 60 μg/day of the somatostatin analog RC-160 for 25 days decreased tumor volume by 70.9% ($P < 0.01$), 58.3% ($P < 0.05$), and 60.6% ($P < 0.01$), resp., vs. the control value. The levels of GH in serum were decreased in all of the treated groups, but only RC-160 significantly reduced serum insulin-like growth factor I (IGF-I). The levels of mRNA for IGF-I and -II and for their receptors in OV-1063 tumors were investigated by multiplex RT-PCR. No expression of mRNA for IGF-I was detected, but treatment with JV-1-136 caused a 51.8% decrease ($P < 0.05$) in the level of mRNA for IGF-II in tumors. Exposure of OV-1063 cells cultured in vitro to GHRH, IGF-I, or IGF-II significantly ($P < 0.05$) stimulated cell growth, but 10-5 M JV-1-36 nearly completely inhibited ($P < 0.001$) OV-1063 cell proliferation. OV-1063 tumors expressed mRNA for GHRH receptors and showed the presence of binding sites for GHRH. Our results indicate that antagonistic analogs of GHRH and the somatostatin analog RC-160 inhibit the growth of epithelial ovarian cancers. The effects of RC-160 seem to be exerted more on the pituitary GH-hepatic IGF-I axis, whereas GHRH antagonists appear to reduce IGF-II production and interfere with the autocrine regulatory pathway. The antitumorigenic action of GHRH antagonists appears to be mediated by GHRH receptors found in OV-1063 tumors.

IT 221377-79-3, JV-1-36
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antagonists of growth hormone-releasing hormone and somatostatin analog RC-160 inhibit the growth of OV-1063 human epithelial ovarian cancer cell line xenografted into nude mice)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 12 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:829867 CAPLUS Full-text
DOCUMENT NUMBER: 134:216921
TITLE: Suppression of tumor growth by growth hormone-releasing hormone antagonist JV-1-36 does not involve the inhibition of autocrine production of insulin-like growth factor II in H-69 small cell lung carcinoma
AUTHOR(S): Kiaris, H.; Schally, A. V.; Varga, J. L.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, New Orleans, LA, 70112-1262, USA
SOURCE: Cancer Letters (Shannon, Ireland) (2000), 161(2), 149-155
CODEN: CALEDQ; ISSN: 0304-3835
PUBLISHER: Elsevier Science Ireland Ltd.

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Although a high antitumor activity of growth hormone releasing hormone (GHRH) antagonists has been demonstrated in various tumors, the mechanism of action of these peptide analogs remains poorly understood. An association has been observed between the antitumor effects of GHRH antagonists and the inhibition of insulin-like growth factors (IGFs), but it is not clear whether the suppression of IGFs is obligatory for the action of GHRH antagonists. In the present study we investigated various components of the IGF system in H-69 small cell lung carcinoma (SCLC) xenografted into nude mice and treated with GHRH antagonist JV-1-36. After 31 days of treatment with JV-1-36, tumor weight was inhibited by about 70% as compared with the controls. Reverse transcription-polymerase chain reaction (RT-PCR) anal. indicated that H-69 tumors express mRNAs for IGF-II and IGF-receptors- (IGFR-) I and II, but not for IGF-I. The levels of mRNA for IGF-II and IGFR-I and -II were not affected by the treatment with JV-1-36. Exposure to antibody IRa, which blocks the binding of IGF-I and -II to IGFR-I, inhibited the proliferation of H-69 cells in vitro, indicating that IGF-II present in the tumors might stimulate the proliferation of H-69 SCLC in an autocrine manner. Collectively our results suggest that inhibition of tumor growth by GHRH antagonists is not associated with the suppression of the autocrine stimulation by IGF-II in H-69 SCLC.

IT 221377-79-3, JV-1-36
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mechanism of tumor growth suppression by growth hormone-releasing hormone antagonist JV-1-36)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 13 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:824291 CAPLUS Full-text
DOCUMENT NUMBER: 134:21425
TITLE: Protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components
INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen
PATENT ASSIGNEE(S): Conjuchem, Inc., Can.
SOURCE: PCT Int. Appl., 733 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517 <--
WO 2000069900	A3	20010215		
WO 2000069900	A9	20020704		
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EP 1105409	A2	20010613	EP 2000-936023	20000517 <--
EP 1105409	B1	20060301		
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AU 765753	B2	20030925	AU 2000-51393	20000517 <--
EP 1591453	A1	20051102	EP 2005-105384	20000517 <--
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EP 1598365	A1	20051123	EP 2005-105387	20000517 <--
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PT 1105409	T	20060731	PT 2000-936023	20000517 <--
ES 2257298	T3	20060801	ES 2000-936023	20000517 <--
US 6849714	B1	20050201	US 2000-623548	20000905 <--
US 6514500	B1	20030204	US 2000-657332	20000907 <--
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JP 2005263807	A	20050929	JP 2005-115175	20050412 <--
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PRIORITY APPLN. INFO.:			US 1999-134406P	P 19990517 <--
			US 1999-153406P	P 19990910 <--
			US 1999-159783P	P 19991015 <--
			CA 2000-2363712	A3 20000517 <--
			CA 2000-2373680	A3 20000517 <--
			CN 2000-807671	A3 20000517 <--
			EP 2000-932570	A3 20000517 <--
			EP 2000-936023	A3 20000517 <--
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			US 2000-623543	A1 20000905 <--
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			US 2002-400199P	P 20020731 <--
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			WO 2003-CA1097	W 20030729
			US 2003-471348	B1 20030908
			US 2003-722733	A1 20031125
			US 2005-40810	A2 20050121
			US 2005-170967	A1 20050629
			US 2005-215967	A1 20050830

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a blood component. The solid phase peptide synthesis of a number of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a

K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH2) conjugated to human serum albumin via MPA remained relatively constant through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amount of K5 in only 4 h in plasma.

IT 309244-12-0
RL: PRP (Properties)
(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

RN 309244-12-0 CAPLUS

CN 114: PN: WO0069900 SEQID: 118 unclaimed sequence (9CI) (CA INDEX NAME)

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

Absolute stereochemistry.

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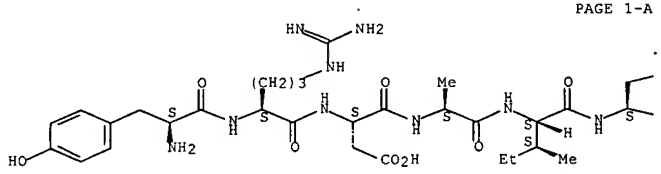

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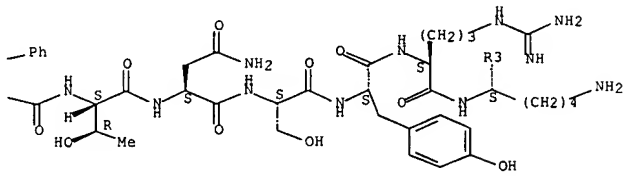

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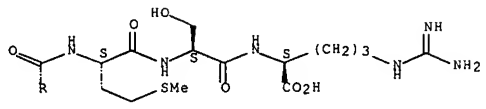

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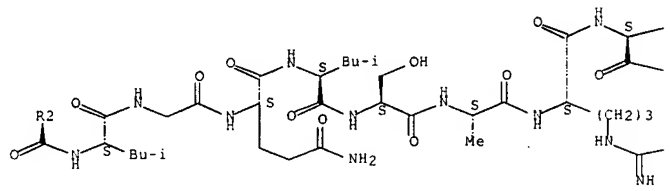

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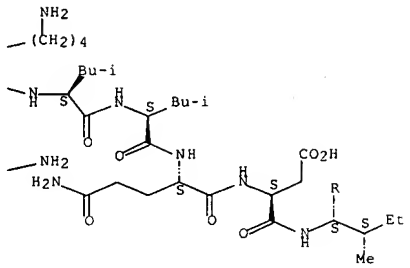

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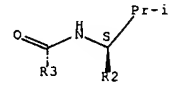


L23 ANSWER 14 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:664852 CAPLUS Full-text
DOCUMENT NUMBER: 133:348337
TITLE: Human renal cell carcinoma expresses distinct binding sites for growth hormone-releasing hormone
AUTHOR(S): Halmos, Gabor; Schally, Andrew V.; Varga, Jozsef L.; Plonowski, Artur; Rekasi, Zoltan; Czompoly, Tamas
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, Tulane University School of Medicine, New Orleans, LA, 70112-2699, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2000), 97(19), 10555-10560

CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone-releasing hormone (GHRH) inhibit the proliferation of various human cancers in vitro and in vivo by mechanisms that include apparent direct effects through specific binding sites expressed on tumors and that differ from pituitary human GHRH (hGHRH) receptors. In this study, GHRH antagonist JV-1-38 (20 μg/day per animal s.c.) inhibited the growth of orthotopic CAKI-1 human renal cell carcinoma (RCC) by 83% and inhibited the development of metastases to lung and lymph nodes. Using ligand competition assays with 125I-labeled GHRH antagonist JV-1-42, the authors demonstrated the presence of specific high-affinity (Kd = 0.25 nM) binding sites for GHRH with a maximal binding capacity (Bmax) of 70.2 fmol/mg of membrane protein in CAKI-1 tumors. These receptors bind GHRH antagonists preferentially and display a lower affinity for hGHRH. The binding of 125I-JV-1-42 is not inhibited by vasoactive intestinal peptide (VIP)-related peptides sharing structural homol. with hGHRH. The receptors for GHRH antagonists on CAKI-1 tumors are distinct from binding sites detected with 125I-VIP (Kd = 0.89 nM; Bmax = 183.5 fmol/mg of protein) and also have different characteristics from GHRH receptors on rat pituitary as documented by the insignificant binding of [His1,125I-Tyr10,Nle27]hGHRH(1-32)NH2. Reverse transcription-PCR revealed the expression of splice variants of hGHRH receptor in CAKI-1 RCC. Biodistribution studies demonstrate an in vivo uptake of 125I-JV-1-42 by the RCC tumor tissue. The presence of specific receptor proteins that bind GHRH antagonists in CAKI-1 RCC supports the view that distinct binding sites that mediate the inhibitory effect of GHRH antagonists are present on various human cancers.

IT 221377-58-8, JV 1-42 221377-79-3, JV 1-36
305322-14-9, JV 1-38
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(human renal cell carcinoma expresses distinct binding sites for growth hormone-releasing hormone and antagonists distinct from growth hormone-releasing hormone receptor)

RN 221377-58-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 305322-14-9 CAPLUS

CN L-Lysine, N-(2-phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNKY RKVLXQLSAR KLLQDIXRK

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 15 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:545266 CAPLUS Full-text
DOCUMENT NUMBER: 134:240
TITLE: Antagonists of growth hormone-releasing hormone inhibit the growth of U-87MG human glioblastoma in nude mice
AUTHOR(S): Kiaris, Hippokratis; Schally, Andrew V.; Varga, Jozsef L.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center and Section of Experimental Medicine, Department of Medicine, Tulane University School of Medicine, New Orleans, LA, USA
SOURCE: Neoplasia (New York) (2000), 2(3), 242-250
CODEN: NEOPFL; ISSN: 1522-8002
PUBLISHER: Nature America Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of growth hormone-releasing hormone(GH-RH)inhibit the growth of various cancers by mechanisms that involve the suppression of the insulin-like growth factor (IGF)-I and/or IGF-II. In view of the importance of the IGF system in glioma tumorigenesis, the effects of GH-RH antagonists MZ-5-156 and JV-1-36 were investigated in nude mice bearing s.c. and ortho-topic xenografts of U-87MG human glioblastomas. After 4 wk of therapy with MZ-5-156 or JV-1-36 at the dose of 20 μg/day per animal, the final volume of s.c. U-87MG tumors was significantly ($P < .01$) decreased by 84% and 76%, resp., as compared with controls. Treatment with GH-RH antagonists also reduced tumor weight and the levels of mRNA for IGF receptor type I (IGFR-I). A reduction in the mRNA levels for IGF-II was found in tumors of mice treated with MZ-5-156. Treatment with MZ-5-156 or JV-1-36 also extended the survival of nude mice implanted ortho-topically with U-87MG glioblastomas by 81% ($P < .005$) and 18%, resp., as compared with the controls. Exposure in vitro to GH-RH antagonists MZ-5-156 or JV-1-36 at 1 μM concentration for 24 h decreased the tumorigenicity of U-87MG cells in nude mice by 10% to 30% and extended the latency period for the development of s.c. palpable tumors by 31% to 56%, as compared with the controls. Exposure of U-87MG cells to GH-RH antagonists in vitro also resulted in a time-dependent increase in the mRNA levels of IGFR-II

or a decrease in the mRNA levels of IGFR-I. MRNA for GH-RH was detected in U-87MG cells and xenografts implying that GH-RH may play a role in the pathogenesis of this tumor. Our results suggest that GH-RH antagonists MZ-5-156 and JV-1-36 inhibit the growth of U-87MG human glioblastoma by mechanisms that involve the suppression of IGF system. Antagonistic analogs of GH-RH merit further development for the treatment of malignant glioblastoma.

IT 221377-79-3, JV 1-36
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists of GHRH inhibit growth of human glioblastoma in nude mice)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 16 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:521514 CAPLUS Full-text
DOCUMENT NUMBER: 133:217935
TITLE: Antagonists of growth hormone-releasing hormone and vasoactive intestinal peptide inhibit tumor proliferation by different mechanisms: evidence from in vitro studies on human prostatic and pancreatic cancers
AUTHOR(S): Rekasi, Zoltan; Varga, Jozsef L.; Schally, Andrew V.; Halmos, Gabor; Armatis, Patricia; Groot, Kate; Czompoly, Tamas
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, and Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70112, USA
SOURCE: Endocrinology (2000), 141(6), 2120-2128
CODEN: ENDOAO; ISSN: 0013-7227
PUBLISHER: Endocrine Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antagonists of GH-releasing hormone (GHRH) and vasoactive intestinal peptide (VIP) inhibit the proliferation of various tumors in vitro and in vivo, but a comparison of their antitumor effects and mechanisms of action has not been reported to date. The authors recently synthesized and characterized a series of analogs, some of which are primarily GHRH antagonists (JV-1-36, JV-1-38, and JV-1-42), whereas others are more selective for VIP receptors (VPAC-R; JV-1-50, JV-1-51, JV-1-52, and JV-1-53). LNCaP human prostatic cancer cells express VPAC-R, with predominant subtype 1 determined by RT-PCR. The authors' studies show that GHRH antagonists significantly inhibit the proliferation of both VPAC-R pos. LNCaP cells ($P < 0.001$) and VPAC-R neg. MiaPaCa-2 human pancreatic cancer cells cultured in vitro ($P < 0.05$ to $P < 0.001$). Growth inhibition of LNCaP cells is accompanied by a proportional reduction in prostate-specific antigen (PSA) secretion ($P < 0.001$). In a superfusion

system, the inhibitory activities of the analogs on the rate of VIP and GHRH-induced PSA secretion correlate well with their VPAC-R binding affinities to LNCaP cell membranes. Antagonists more selective for VPAC-R display a stronger inhibition of inducible PSA release than GHRH antagonists, but have smaller effects or no effects on proliferation and PSA secretion in culture. Collectively, the authors' findings demonstrate that the antiproliferative activity of the analogs on cancer cells is not correlated to their VPAC-R antagonistic potencies. Because GHRH antagonists inhibit the proliferation of LNCaP cells more powerfully than VPAC-R antagonists and also suppress the growth of VPAC-R-neg. MiaPaCa-2 cells, it can be concluded that their antiproliferative effect is exerted through a mechanism independent of VPAC-R.

IT 221377-58-8 221377-59-9 221377-79-3
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(GH-RH antagonists inhibit tumor proliferation more powerfully than VIP receptor antagonists suggesting VIP receptor independent mechanism in human prostatic and pancreatic cancer cell lines)

RN 221377-58-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-59-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 17 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:430815 CAPLUS Full-text
DOCUMENT NUMBER: 133:290719
TITLE: Antagonists of growth hormone-releasing hormone arrest the growth of MDA-MB-468 estrogen-independent human breast cancers in nude mice
AUTHOR(S): Kahan, Zsuzsanna; Varga, Jozsef L.; Schally, Andrew V.; Rekasi, Zoltan; Armatis, Patricia; Chatzistamou, Ioulia; Czompoly, Tamas; Halmos, Gabor
CORPORATE SOURCE: Veterans Affairs Medical Center, Endocrine, Polypeptide and Cancer Institute, New Orleans, LA, USA
SOURCE: Breast Cancer Research and Treatment (2000), 60(1), 71-79
CODEN: BCTRD6; ISSN: 0167-6806
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Since antagonists of growth hormone-releasing hormone (GH-RH) inhibit proliferation of various tumors, in this study we investigated the effects of GH-RH antagonists MZ-5-156 or JV-1-36 on growth of estrogen-independent MDA-MB-468 human breast cancers xenografted into nude mice. Both GH-RH antagonists administered at a dose of 20 μg/day induced regression of some and growth arrest of other tumors, while control tumors continued to grow. After 5 wk of therapy with MZ-5-156 or JV-1-36, final volume and weight of MDA-MB-468 tumors were significantly decreased (all p values < 0.001) and serum IGF-I levels as well as tumor IGF-I mRNA expression were reduced as compared with controls. High affinity binding sites for IGF-I were detected by the ligand binding method. Gene expression of human IGF-I receptors, as measured by the RT-PCR, was not significantly different in control and treated MDA-MB-468 tumors. In cell culture, IGF-I did not stimulate, GH-RH slightly stimulated, while MZ-5-156 and JV-1-36 inhibited proliferation of MDA-MB-468 cells known to possess defective insulin and IGF-I receptor signaling. The expression of mRNA for human GH-RH was found in five of 8 tumors treated with GH-RH antagonists, and in one of the five control tumors. These results suggest that GH-RH antagonists inhibit MDA-MB-468 breast cancers possibly through mechanisms involving interference with locally produced GH-RH.

IT 221377-79-3, JV 1-36
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(221377793; GH-RH antagonists inhibition of estrogen-independent human breast cancer)

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 18 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:384335 CAPLUS Full-text
DOCUMENT NUMBER: 133:130085
TITLE: Antagonists of growth hormone-releasing hormone (GH-RH) inhibit IGF-II production and growth of HT-29 human colon cancers
AUTHOR(S): Szepeshazi, K.; Schally, A. V.; Groot, K.; Armatis, P.; Halmos, G.; Hebert, F.; Szende, B.; Varga, J. L.; Zarandi, M.
CORPORATE SOURCE: Veterans Affairs Medical Center, Endocrine, Polypeptide and Cancer Institute, New Orleans, LA, 70112-1262, USA
SOURCE: British Journal of Cancer (2000), 82(10), 1724-1731
CODEN: BJCAAI; ISSN: 0007-0920
PUBLISHER: Harcourt Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Insulin-like growth factors (IGFs) I and II are implicated in progression of various tumors including colorectal carcinomas. To interfere with the production of IGFs, the authors treated male nude mice bearing xenografts of HT-29 human colon cancer with various potent growth hormone-releasing hormone (GH-RH) antagonists. Twice daily injections of antagonist MZ-4-71, 10 μg i.p. or 5 μg s.c. resulted in a significant 43-45% inhibition of tumor growth. Longer acting GH-RH antagonists, MZ-5-156 and JV-1-36 given once daily at doses of 20 μg s.c. produced a 43-58% decrease in volume and weight of cancers. Histol. analyses of HT-29 cancers demonstrated that both a decreased cell proliferation and an increased apoptosis contributed to tumor inhibition. GH-RH antagonists did not change serum IGF-I or IGF-II levels, but significantly decreased IGF-II concentration and reduced mRNA expression for IGF-II in tumors. In vitro studies showed that HT-29 cells produced and secreted IGF-II into the medium, and addition of MZ-5-156 dose-dependently decreased IGF-II production by about 40% as well as proliferation of HT-29 cells. The authors' studies demonstrate that GH-RH antagonists inhibit growth of HT-29 human colon cancers in vivo and in vitro. The effect of GH-RH antagonists may be mediated through a reduced production and secretion of IGF-II by cancer cells.

IT 190791-06-1 286850-19-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antagonists of growth hormone-releasing hormone inhibit IGF-II production and growth of HT-29 human colon cancers)

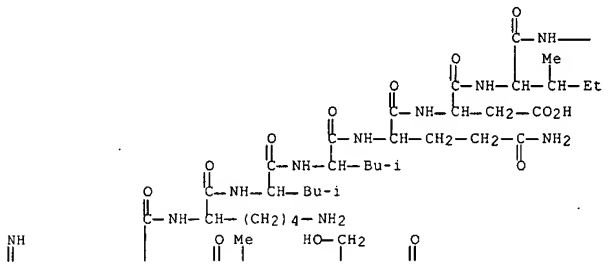
RN 190791-06-1 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-L-alanine-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

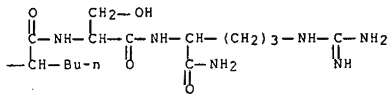
NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIXSR

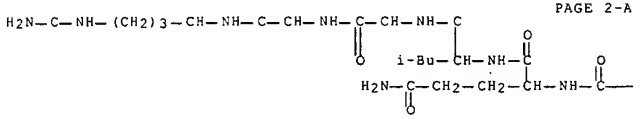
PAGE 1-A



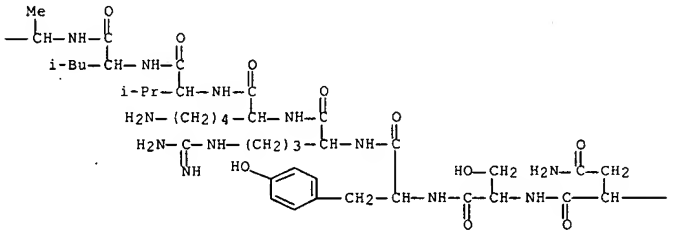
PAGE 1-B



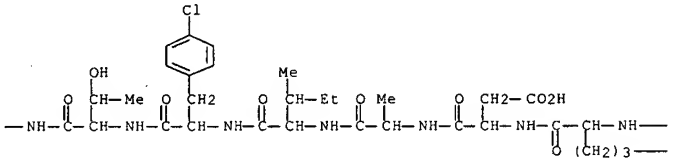
PAGE 2-A



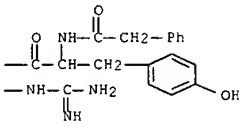
PAGE 2-B



PAGE 2-C



PAGE 2-D



RN 286850-19-9 CAPLUS
CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXSR

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 19 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:284018 CAPLUS Full-text
DOCUMENT NUMBER: 132:303894
TITLE: Antagonistic analogs of GH-RH inhibiting IGF-I and -II
INVENTOR(S): Schally, Andrew V.; Varga, Jozsef; Zarandi, Marta
PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6057422	A	20000502	US 1998-199381	19981125	<--
CA 2351665	A1	20000602	CA 1999-2351665	19991123	<--
WO 2000031136	A1	20000602	WO 1999-US27822	19991123	<--
W: AU, BG, BR, BY, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, UZ, YU, ZA, AM, AZ, MD, TJ, TM					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
BR 9915512	A	20010807	BR 1999-15512	19991123	<--
EP 1133522	A1	20010919	EP 1999-963962	19991123	<--
EP 1133522	B1	20060705			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY					
TR 200101492	T2	20011121	TR 2001-200101492	19991123	<--
HU 200105094	A2	20020429	HU 2001-5094	19991123	<--
JP 2002530432	T	20020917	JP 2000-583962	19991123	<--
AU 757222	B2	20030206	AU 2000-20291	19991123	<--
RU 2235099	C2	20040827	RU 2001-117218	19991123	<--
NZ 511307	A	20050128	NZ 1999-511307	19991123	<--
AT 332310	T	20060715	AT 1999-963962	19991123	<--
ES 2264279	T3	20061216	ES 1999-963962	19991123	<--
TW 585873	B	20040501	TW 1999-88120503	19991124	<--
US 7026281	B1	20060411	US 2000-547215	20000411	<--
NO 2001002489	A	20010704	NO 2001-2489	20010521	<--
MX 2001PA05212	A	20000821	MX 2001-PA5212	20010524	<--
BG 105638	A	20020131	BG 2001-105638	20010622	<--

BG 65137	B1	20070330			
HK 1036461	A1	20060915	HK 2001-107515	20011029	<--
IN 2001KN00563	A	20060616	IN 2001-KN563	20011224	<--
PRIORITY APPLN. INFO.:			US 1998-199381	A 19981125	<--
			WO 1999-US27822	W 19991123	<--

OTHER SOURCE(S): MARPAT 132:303894
AB There is provided a novel series of synthetic analogs of hGH-RH(1-29) NH2. These analogs inhibit the activity of endogenous hGH-RH, and therefore prevent the release of growth hormone. The stronger inhibitory potencies of the new analogs, as compared to previously described ones, results from replacement of various amino acids. The GH-RH antagonists are effective in treating cancer, for example human cancers of the breast, lung, colon, brain, pancreas, and prostate where the receptors for IGF-I or IGF-II are present.
IT 221377-28-2P 221377-49-7P 221377-52-2P
221377-57-7P 221377-58-8P 221377-59-9P
221377-60-2P 221377-76-0P 221377-77-1P
221377-78-2P 221377-79-3P 221377-80-6P
265307-63-9P 265307-91-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antagonistic analogs of GH-RH inhibiting IGF-I and -II for use in treating cancer)
RN 221377-28-2 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-arginyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXRLSAR KLLQDIXSR

RN 221377-49-7 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-norleucyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXSR

RN 221377-52-2 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXSR

RN 221377-57-7 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXRR

RN 221377-58-8 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-59-9 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-60-2 CAPLUS

CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-76-0 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-77-1 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-78-2 CAPLUS

CN L-Lysinamide, N-(1H-indol-3-ylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-80-6 CAPLUS
CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 265307-63-9 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 265307-91-3 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-D-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIRRR

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 20 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:99362 CAPLUS Full-text
DOCUMENT NUMBER: 132:217257
TITLE: Antagonistic actions of analogs related to growth hormone-releasing hormone (GHRH) on receptors for GHRH and vasoactive intestinal peptide on rat pituitary and pineal cells in vitro
AUTHOR(S): Rekasi, Zoltan; Varga, Jozsef L.; Schally, Andrew V.; Halmos, Gabor; Groot, Kate; Czompoly, Tamas
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, and Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70112, USA

SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2000), 97(3), 1218-1223
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Peptide analogs of growth hormone-releasing hormone (GHRH) can potentially interact with vasoactive intestinal peptide (VIP) receptors (VPAC1-R and VPAC2-R) because of the structural similarities of these two hormones and their receptors. The authors synthesized four new analogs related to GHRH (JV-1-50, JV-1-51, JV-1-52, and JV-1-53) with decreased GHRH antagonistic activity and increased VIP antagonistic potency. To characterize various peptide analogs for their antagonistic activity on receptors for GHRH and VIP, the authors developed assay systems based on superfusion of rat pituitary and pineal cells. Receptor-binding affinities of peptides to the membranes of these cells were also evaluated by radioligand competition assays. Previously reported GHRH antagonists JV-1-36, JV-1-38, and JV-1-42 proved to be selective for GHRH receptors, because they did not influence VIP-stimulated VPAC2 receptor-dependent prolactin release from pituitary cells or VPAC1 receptor-dependent cAMP efflux from pinealocytes but strongly inhibited GHRH-stimulated growth hormone (GH) release. Analogs JV-1-50, JV-1-51, and JV-1-52 showed various degrees of VPAC1-R and VPAC2 antagonistic potency, although also preserving a substantial GHRH antagonistic effect. Analog JV-1-53 proved to be a highly potent VPAC1 and VPAC2 receptor antagonist, devoid of inhibitory effects on GHRH-evoked GH release. The antagonistic activity of these peptide analogs on processes mediated by receptors for GHRH and VIP was consistent with the binding affinity. The analogs with antagonistic effects on different types of receptors expressed on tumor cells could be utilized for the development of new approaches to treatment of various human cancers.
IT 221377-58-8 221377-59-9 221377-79-3
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(antagonistic actions of GHRH analogs on receptors for GHRH and VIP in rat pituitary and pineal cells in vitro)
RN 221377-58-8 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-59-9 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 21 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:396688 CAPLUS Full-text
DOCUMENT NUMBER: 131:209293
TITLE: Systematic lactam scan of hGRF 1-29-NH2 yields potent agonists and antagonists
AUTHOR(S): Cervini, L.; Donaldson, C.; Koerber, S.; Vale, W.; Rivier, J.
CORPORATE SOURCE: Clayton Foundation Laboratories for Peptide Biology, The Salk Institute, La Jolla, CA, 92037, USA
SOURCE: Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June 14-19, 1997 (1999), Meeting Date 1997, 637-638. Editor(s): Tam, James P.; Kaumaya, Pravin T. P. Kluwer: Dordrecht, Neth.
CODEN: 67UCAR
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The authors present a complete i-(i + 3) lactam scan of [MeTyr1, Ala15, Glu1,Lys1+3, Nle27]hGRF(1-29)-NH2. Potencies for the 26 analogs in this series were compared to that of the agonist standard hGRF(1-40)-OH. The most potent analogs were those with i-(i + 3) cycles between residues 4-7, 5-8, 9-12, 16-19, 21-24, 22-25 and 25-28. Three antagonists were designed by including point substitutions (Darg2 and Cpa6) in representative, potent cyclic analogs of the lactam scan. The compds. are [MeTyr1,DArg2,Cpa6,Nle27]-rGRF1-29NH2 standard (1), c(22- 25)[MeTyr1,DArg2,Cpa6,Ala15,Glu22,Lys25,Nle27] (2), c(25-28)[MeTyr1,DArg2,Cpa6,Ala15,22,Glu25,Nle27,Lys28] (3), and c(25-29)[MeTyr1,DArg2,Cpa6,Ala15'22,DAsp25,Nle27,Orn29] (4). The i-(i + 4) analog 4 is half as potent as analogs 2 and 3 with smaller cycles, and all three bridging scaffolds yielded relatively more potent agonists than antagonists. In conclusion, modifications that produce increased agonist potencies may also produce potent antagonists, albeit to a slightly lesser degree. These antagonists exemplify the application of SAR scan data to rationally design potent analogs and provide a useful tool for probing the structural requirements necessary for GRF receptor binding. Conformational restriction yields subtle effects in the peptide-receptor interaction, but bridging elements in a peptide.

IT 243132-98-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(systematic lactam scan of hGRF 1-29-NH2 yields potent agonists and antagonists)

RN 243132-98-1 CAPLUS

CN L-Ornithinamide, N-methyl-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-alanyl-L-leucyl-L-glutaminyl-D-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-, (25→29)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLAQLSAR KALQDIXSX

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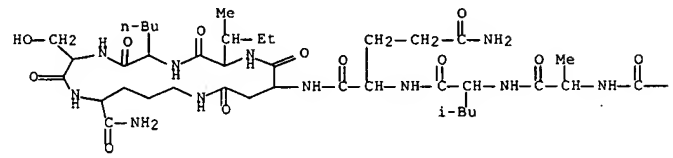

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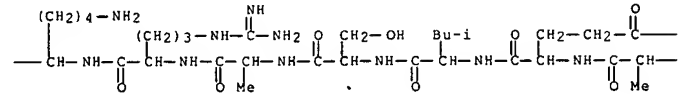

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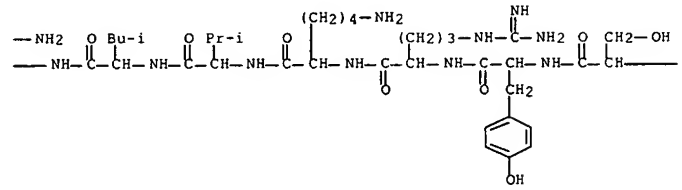

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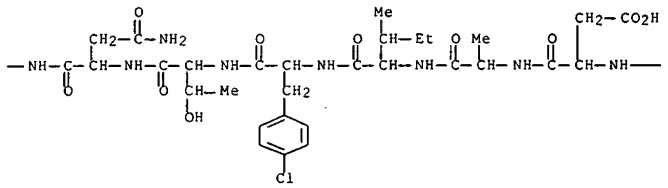

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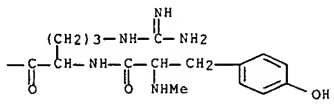

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 22 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:63483 CAPLUS Full-text
DOCUMENT NUMBER: 130:247129
TITLE: Synthesis and biological evaluation of antagonists of growth hormone-releasing hormone with high and protracted in vivo activities; (inhibitors of GH release/structure-activity relationships/cancer therapy)
AUTHOR(S): Varga, Jozsef L.; Schally, Andrew V.; Csernus, Valer J.; Zarandi, Marta; Halmos, Gabor; Groot, Kate; Rekasi, Zoltan
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70112, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1999), 96(2), 692-697
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Some antagonists of human growth hormone-releasing hormone (hGH-RH) synthesized previously were shown to inhibit in vivo proliferation of various

human cancers in nude mice. However, the activity of these analogs requires an increase to assure clin. efficacy. In an attempt to prepare hGH-RH antagonists with a high and protracted activity, we synthesized and biol. tested 22 antagonistic analogs of hGH-RH(1-29)NH2. The ability of the antagonists to inhibit hGH-RH-induced GH release was evaluated in vitro in a superfused rat pituitary system, as well as in vivo after i.v. injection into rats. The binding affinity of the peptides to GH-RH receptors also was determined All antagonistic analogs had the common core sequence [PhAc-Tyr1,D-Arg2, Phe(4-Cl)6 (para-chlorophenylalanine), Abu15 (α-aminobutyric acid),Nle27]hGH-RH(1-29)NH2 and contained Arg, D-Arg, homoarginine (Har), norleucine (Nle), and other substitutions. The following analogs were determined to have a high and/or protracted antagonistic activity: [PhAc-Tyr1,D-Arg2,Phe(4-Cl)6,Arg9,Abu15,Nle27,D-Arg29]hGH-RH(1- 29)NH2 (JV-1-10), [PhAc-Tyr1,D-Arg2,Phe(4-Cl)6,Abu15,Nle27, D-Arg28,Har29]hGH-RH(1-29)NH2 (MZ-6-55), [PhAc-Tyr1,D-Arg2,Phe(4- Cl)6,Arg9,Abu15,Nle27,D-Arg28,Har29]hGH-RH(1-29)NH2 (JV-1-36), and [PhAc-Tyr1,D-Arg2,Phe(4-Cl)6,Har9,Tyr(Me)10,Abu15,Nle27,D-Arg28,Har29]hGH- RH(1-29)NH2 (JV-1-38). Among the peptides tested, analog JV-1-36 showed the highest GH-RH antagonistic activity in vitro and also induced a strong and prolonged inhibition of GH release in vivo for at least 30 min. The antagonist JV-1-38 was slightly less potent than JV-1-36 both in vitro and in vivo but proved to be very long-acting in vivo, suppressing the GH-RH-induced GH release even after 60 min. High and protracted in vivo activities of these antagonists indicate an improvement over earlier GH-RH analogs. Some of these hGH-RH antagonists could find clin. applications in the treatment of cancers dependent on insulin-like growth factors I and II.

IT 221377-28-2P 221377-30-6P 221377-49-7P
221377-52-2P 221377-57-7P 221377-58-8P
221377-59-9P 221377-60-2P 221377-76-0P
221377-77-1P 221377-78-2P 221377-79-3P
221377-80-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and biol. evaluation of antagonists of growth hormone-releasing hormone with high and protracted in vivo activities)

RN 221377-28-2 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-arginyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXRLSAR KLLQDIXSR

RN 221377-30-6 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-L-norleucine-27-L-norleucine-29-D-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 221377-49-7 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-norleucyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNXY RKVLXQLSAR KLLQDIXSR

RN 221377-52-2 CAPLUS
CN D-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXSR

RN 221377-57-7 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXRR

RN 221377-58-8 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-59-9 CAPLUS
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NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-60-2 CAPLUS
CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-histidyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNRY RKVLXQLSAR KLLQDIXRR

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NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-77-1 CAPLUS
CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-78-2 CAPLUS
CN L-Lysinamide, N-(1H-indol-3-ylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-

asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-79-3 CAPLUS

CN L-Lysinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-N6-(aminoiminomethyl)-L-lysyl-O-methyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

RN 221377-80-6 CAPLUS

CN L-Lysinamide, N-(1-naphthalenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-arginyl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-D-arginyl-N6-(aminoiminomethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNRY RKVLXQLSAR KLLQDIXRR

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 23 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:597995 CAPLUS Full-text

DOCUMENT NUMBER: 130:25311

TITLE: Synthesis and in vitro biological activities of new potent GH-RH antagonists with citrulline substitutions

AUTHOR(S): Zarandi, Marta; Kovacs, Magdolna; Horvath, Judit E.; Halmos, Gabor; Groot, Kate; Schally, Andrew V.

CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Tulane University, New Orleans, LA, 70146, USA

SOURCE: Peptides 1996, Proceedings of the European Peptide Symposium, 24th, Edinburgh, Sept. 8-13, 1996 (1998), Meeting Date 1996, 933-934. Editor(s): Ramage, Robert; Epton, Roger. Mayflower Scientific: Kingswinford, UK.
CODEN: 66RCA5

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report on the preparation and gonadotropin hormone antagonistic activity of citrulline-containing analogs.

IT 198404-49-8P 198404-52-3P 198404-55-6P
216368-91-1P 216368-98-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and biol. activities of new potent GH-RH antagonists with citrulline substitutions)

RN 198404-49-8 CAPLUS

CN L-Ornithinamide, N-(2-methyl-1-oxopropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-N5-(aminocarbonyl)- (9CI) (CA INDEX NAME)

NTE modified

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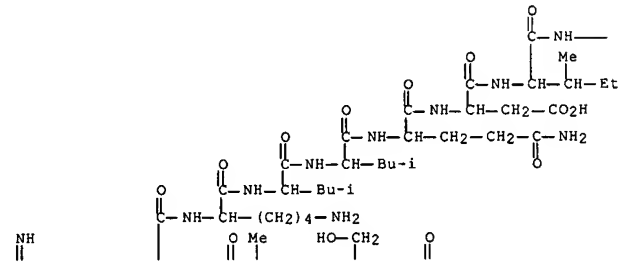

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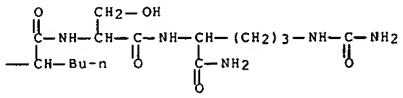

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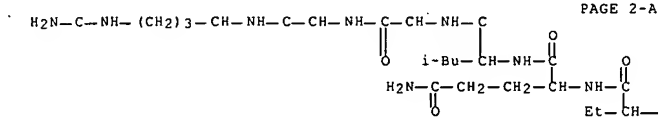

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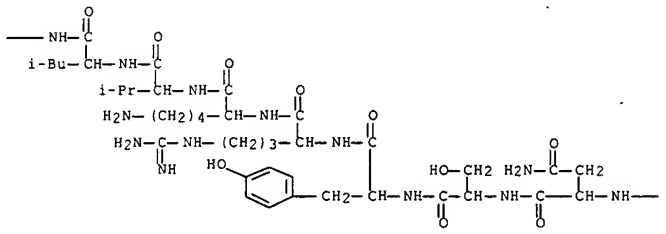

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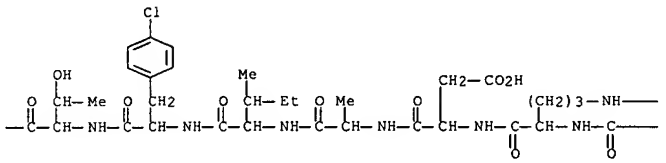

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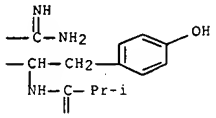

PAGE 3-D

RN 198404-52-3 CAPLUS

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NTE modified

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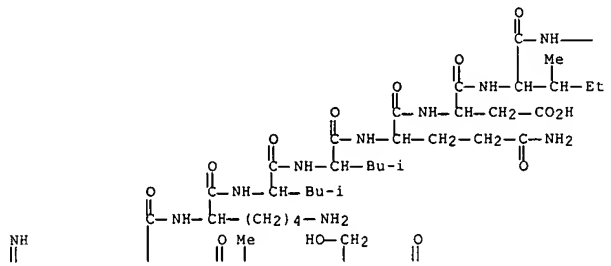

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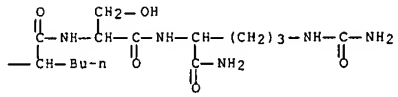

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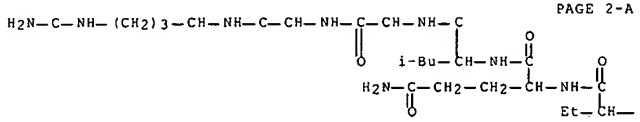

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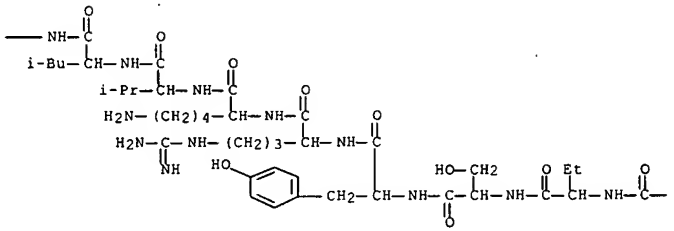

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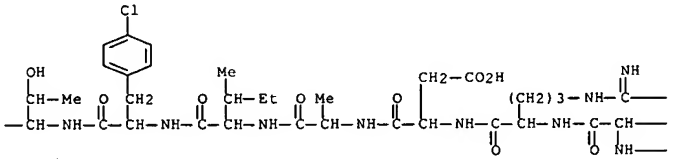

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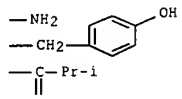

PAGE 3-D

RN 198404-55-6 CAPLUS

CN L-Ornithinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-N5-(aminocarbonyl)- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTXSY RKVLXQLSAR KLLQDIXSX

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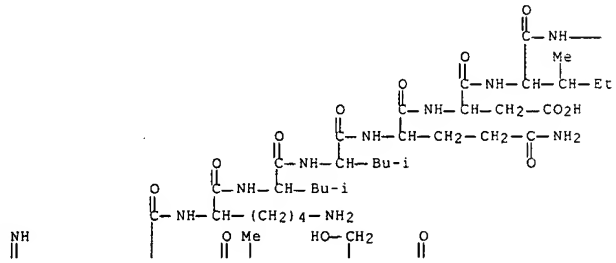

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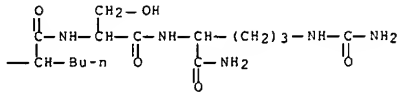

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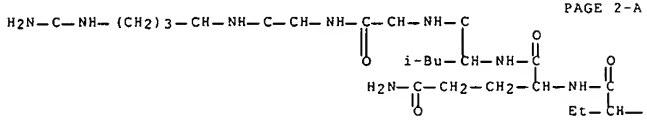

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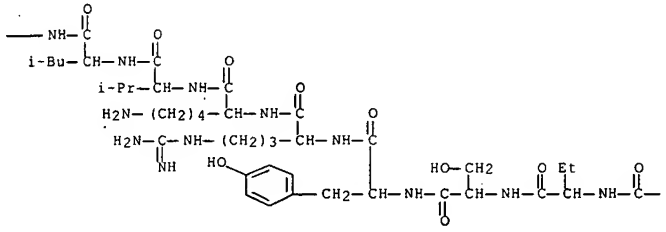

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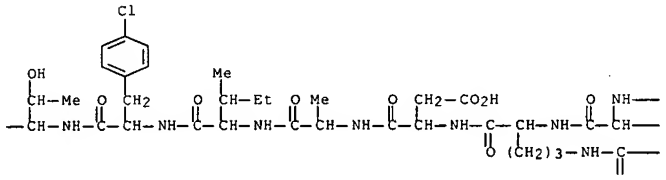

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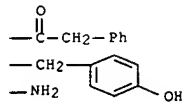

PAGE 3-C

RN 216368-91-1 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 2-[N5-(aminocarbonyl)-L-ornithine]-6-(4-chloro-L-phenylalanine)-15-[(2S)-2-aminobutanoic acid]-27-L-norleucine- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YXDAIFTNSY RKVLXQLSAR KLLQDIXSR

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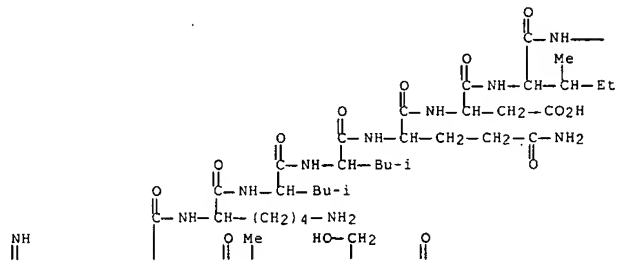

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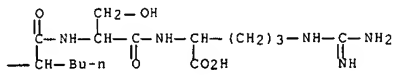

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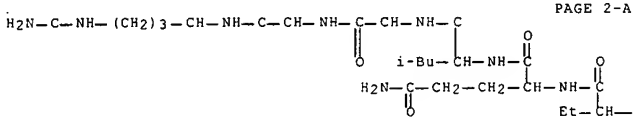

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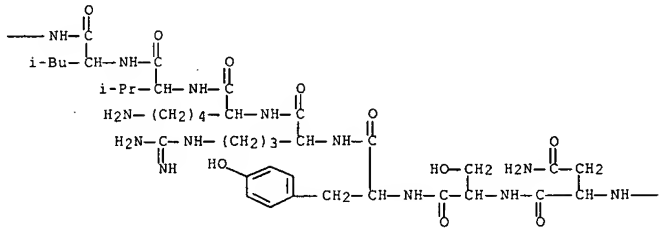

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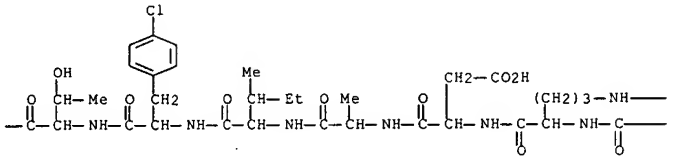

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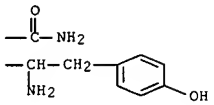

RN 216368-98-8 CAPLUS

CN L-Ornithinamide, N-(2-methyl-1-oxopropyl)-L-tyrosyl-N5-(aminocarbonyl)-D-ornithyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-N5-(aminocarbonyl)- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YXDAIFTNSY RKVLXQLSAR KLLQDIXSX

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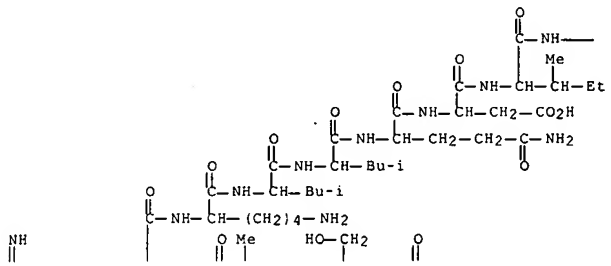

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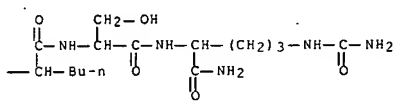

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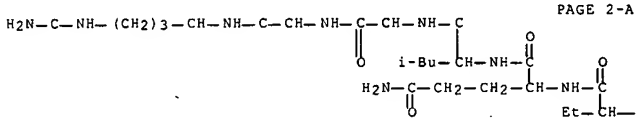

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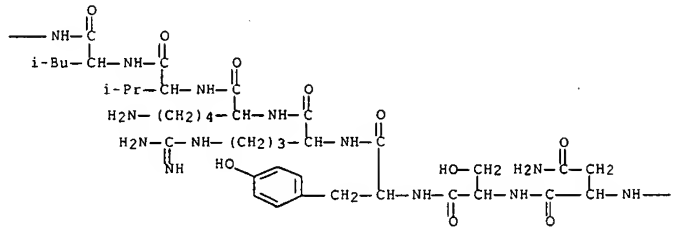

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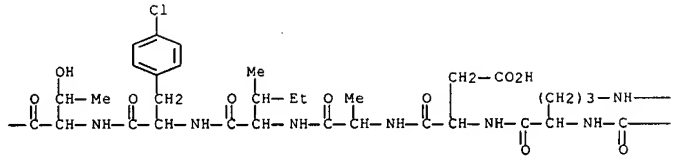

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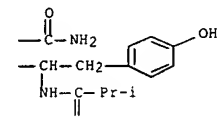

PAGE 3-D

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 24 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:93875 CAPLUS Full-text
DOCUMENT NUMBER: 128:239546
TITLE: New analogs of human growth hormone-releasing hormone (1-29) with high and prolonged antagonistic activity
AUTHOR(S): Toth, Katalin; Kovacs, Magdolna; Zarandi, Marta; Halmos, Gabor; Groot, Kate; Nagy, Attila; Kele, Zoltan; Schally, Andrew V.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Affairs Medical Center, Tulane University School of Medicine, New Orleans, LA, USA
SOURCE: Journal of Peptide Research (1998), 51(2), 134-141
CODEN: JPERFA; ISSN: 1397-002X
PUBLISHER: Munksgaard International Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Based on the authors' previous results, in conjunction with various structural considerations, 19 new analogs of the GHRH antagonist [PhAc-Tyr1,D-Arg2,Phe(pCl)6,Abu15,Nle27,Agm29]hGHRH(1-29) (MZ-5-156) were synthesized by the solid-phase method. These compds. were designed to develop further analogs of this class with increased receptor-binding affinity. All analogs had Abu15 and Nle27 modifications and were acylated with phenylacetic acid at the N-terminus. Most of the analogs had D-Arg2 and Phe(pCl)6 substituents and Agm29 or Arg29-NH2 at the C-terminus. Addnl. single substitutions consisted of the incorporation of D- or L-Tic1, D-Tic2, Tic6 or Phe(pNO2)6 and Arg29-NH2. The Arg29-NH2 analog of MZ-5-156 (KT-48) was further modified by single substitutions using Pal1; D-Tpi2; D- or L-Phe4; Phe(pX)6 X = F, Cl, I; Tyr7; Aib8; Tyr(Me)10 or Phe(pCl)10. Four peptides had multiple substitutions. All

the analogs were evaluated for their ability to inhibit GH release induced by hGHRH(1-29)NH2 in vitro and some were also tested in vivo. Peptides [PhAc-Tyr1,D-Arg2,Phe(pI)6,Abu15,Nle27]hGHRH(1-29)NH2 (KT-30), [PhAc-Tyr1,D-Arg2,Phe(pCl)6,Aib8,Abu15,Nle27]hGHRH(1-29)NH2 (KT-50) and [PhAc-Tyr1,D-Arg2,Phe(pCl)6,Tyr(Me)10,Abu15,Nle27]hGHRH(1-29)NH2 (KT-40) with Phe(pI)6, Aib8 or Tyr(Me)10 modifications, resp., showed high and prolonged inhibitory effect in superfused rat pituitary system. Analog KT-50 also exhibited a strong and long-term inhibitory activity in vivo in rats. Most of the new analogs showed high binding affinities to rat pituitary GHRH receptors.

IT 204767-60-2 204767-61-3 204866-79-5
204866-80-8 204866-81-9 204866-82-0
204866-83-1 204866-84-2
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(new analogs of human growth hormone-releasing hormone (1-29) with high and prolonged antagonistic activity)

RN 204767-60-2 CAPLUS

CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-2-methylalanyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTXSY RKVLXQLSAR KLLQDIXSR

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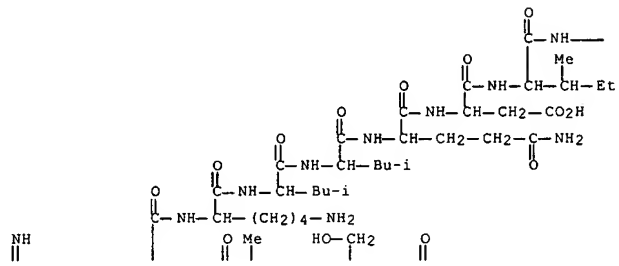

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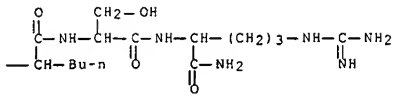

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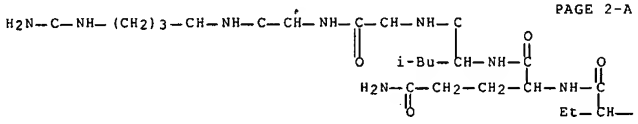

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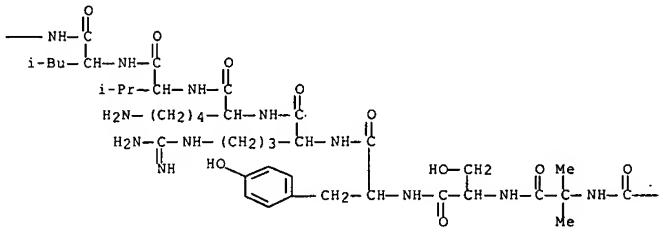

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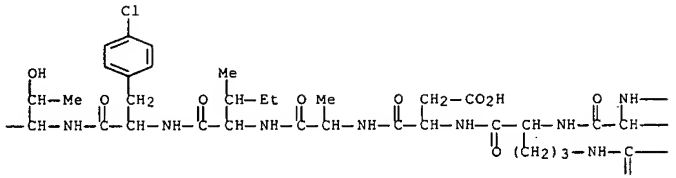

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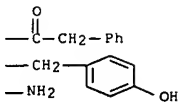

PAGE 3-C

RN 204767-61-3 CAPLUS

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NTE modified

SEQ 1 YRDAIFTXXY RKVLXQLSAR KLLQDIXSR

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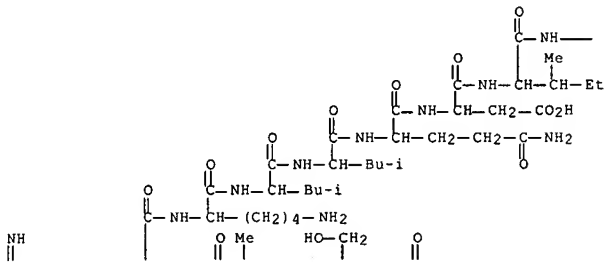

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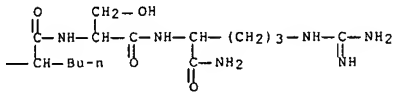

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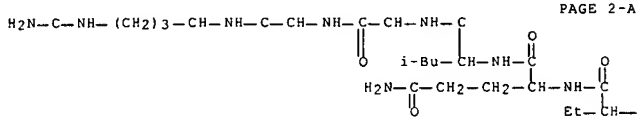

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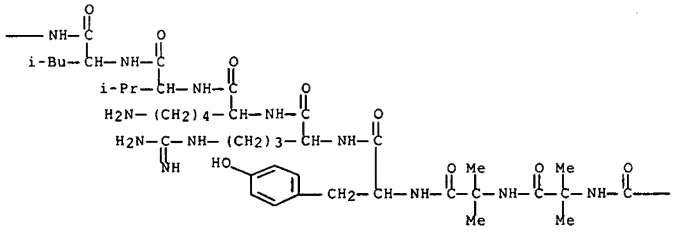

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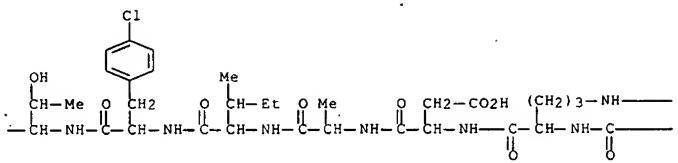

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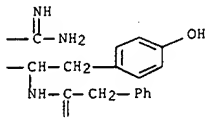

PAGE 3-D

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CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-4-chloro-L-phenylalanyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSF RKVLXQLSAR KLLQDIXSR

RN 204866-80-8 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-[(2S)-2-aminobutanoic acid]-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 204866-81-9 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-fluoro-L-phenylalanine)-15-[(2S)-2-aminobutanoic acid]-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 204866-82-0 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-iodo-L-phenylalanine)-15-[(2S)-2-aminobutanoic acid]-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 204866-83-1 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-10-(O-methyl-L-tyrosine)-15-[(2S)-2-aminobutanoic acid]-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 204866-84-2 CAPLUS
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NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 25 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:746077 CAPLUS Full-text
DOCUMENT NUMBER: 127:359122
TITLE: Preparation of hGH-RH(1-29)NH2 analogs having antagonistic activity
INVENTOR(S): Schally, Andrew V.; Zarandi, Marta; Toth, Katalin
PATENT ASSIGNEE(S): Administrators of the Tulane Educational Fund, USA; Schally, Andrew V.; Zarandi, Marta; Toth, Katalin
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9742223	A1	19971113	WO 1997-US7452	19970502	<--
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RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
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ZA 9703793	A	19971119	ZA 1997-3793	19970502	<--
AU 9731172	A	19971126	AU 1997-31172	19970502	<--
EP 914340	A1	19990512	EP 1997-926399	19970502	<--
EP 914340	B1	20030709			
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			WO 1997-US7452 W	19970502	<--

OTHER SOURCE(S): MARPAT 127:359122

AB Title peptides X-R1-R2-R3-R4-R5-R6-Thr-R8-R9-R10-R11-R12 -Val-Leu-R15-Gln-Leu-Ser-R19-R20-R21-Leu-Leu-Gln-Asp-Ile-R27-R28-R29 [X = H, Ac, anthraquinone-2-carbonyl (Aqc), iodoacetyl (IAc), bromopropionyl (BrProp), OHC, isobutyryl (Ibu), 1- or 2-naphthylacetyl (Nac), 1- or 2-naphthoyl (Npt), 1- or 2-naphthylpropionyl (Npr), phenylacetyl (PhAc), 3-phenylpropionyl (Fpr), other aromatic or nonpolar acyl group; R1 = Tyr, His, Phe(Y); Y = H, F, Cl, Br, NO2, NH2, Me, OMe; R2 = D-Arg, D-Cit, D-Har, D-Lys, D-Tic, D-Orn, R3 = Asp, D-Asp, Ala, D-Ala, Gly; R4 = Ala, Abu, Gly; R5 = Ile, Ala, Gly, R6 = Phe, Tic, Ala, Pro, Tpi, Nal, Phe(Y); R8 = Asn, Gln, Ser, Thr, Val, Leu, Ile, Ala, D-Ala, D-Asn, D-Gln, D-Thr, D-Leu, Abu, D-Abu, Nle, Aib; R9 = Ser; R10 = Tyr or Phe(Y); R11 = Arg, D-Arg, Cit, R12 = Lys, D-Lys, Cit, D-Cit, Orn, D-Orn, Nle, Ala; R15 = Gly, Ala, Abu, Gln; R19 = Ala, Abu; R20 = Arg, D-Arg, Cit; R21 = Lys, D-Lys, Orn, Cit; R27 = Met, Nle, Abu; R28 = Ser, Asn, Asp, Ala, Abu; R29 = Agm, Arg-NH2, Arg-OH, Cit-NH2, Cit-OH, Har-NH2, Har-OH; Abu = 2-aminobutanoyl; Agm = agmatine, Cit = citrulline; Har = homoarginine, Nal = 2-naphthylalanine, Tic = 1,2,3,4-tetrahydroisoquinoline-2-carbonyl, Tpi = 2,3,4,9-tetrahydro-1H-pyrido[3,4-b]indol-3-carbonyl], and pharmaceutically acceptable salts thereof, are prepared and claimed as growth hormone release inhibitors and antitumor agents. Also claimed are cyclic peptides X-A1-B2-A3-R4-R5-R6-Thr-A8-Ser-R10-R11-B12-Val-Leu-R15-A16-A17-Ser-R19-B20- B21-Leu-Leu-Gln-A25-Ile-R27-R28-B29 [X, R4, R5, R10, R15, R27, R28, = as above; A = Glu, D-Glu, Gln, Asp, D-Asp, Asn, Abu, Leu, Tyr, His, Phe(Y); Y = H, F, Cl, Br, NO2, NH2, Me, OMe, Ser, Thr, Val, Ile, Ala, D-Ala, D-Asn, D-Gln, D-Thr, D-Leu, Abu, D-Abu, Nle, Aib; B = Lys, D-Lys, Arg, D-Arg, Orn, D-Orn, Agm; R6 = Phe, Tic, Tpi, Nal, Phe(Y); Y = H, F, Cl, Br, NO2, NH2, Me, OMe], and pharmaceutically acceptable salts thereof, wherein a lactam bridge is formed between any pairs of positions 1,2; 2,3; 8,12; 16,20; 17-21, 21,25; 25,29; or both 8,12 and 21,25. Thus, peptide PhAc-Tyr-D-Arg-Asp-Ala-Ile-Phe(pCl)-Thr-Asn-Ser-Tyr-Arg-Lys-Val-Leu-Abu- Gln-Leu-Ser-Ala-Arg-Lys-Leu-Leu-Gln-Asp-Ile-Nle-Ser-Agm (I) was prepared by standard solid-phase methods on an aminomethyl resin using tert-butoxycarbonyl (Boc) Nα-protection. I antagonized hGH-RH with Ki = 0.0159 nM in an in vitro test, and in an antitumor test, treatment of 10 μg I per day resulted in significant inhibition of growth of SW-1990 tumors in nude mice.

IT 190783-58-5P 190783-59-6P 190791-06-1P
190791-08-3P 198404-49-8P 198404-52-3P

198404-55-6P 198404-60-3P 198404-67-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of human growth hormone releasing factor analogs having antagonistic activity)

RN 190783-58-5 CAPLUS

CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

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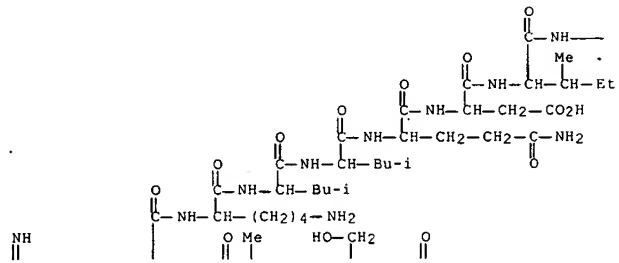

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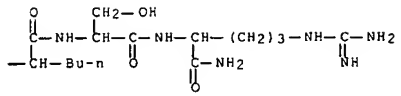

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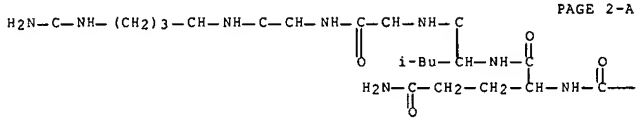

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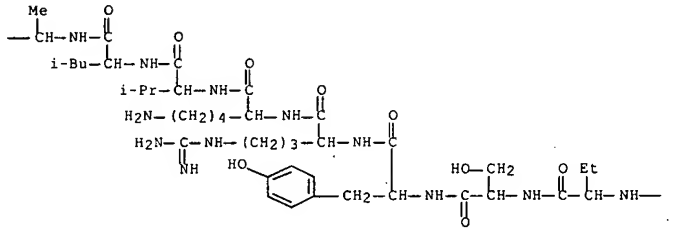

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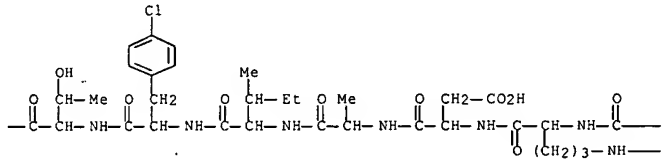

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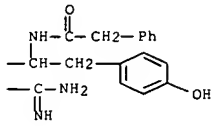

RN 190783-59-6 CAPLUS

CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-(2S)-2-aminobutanoyl- (9CI) (CA INDEX NAME)

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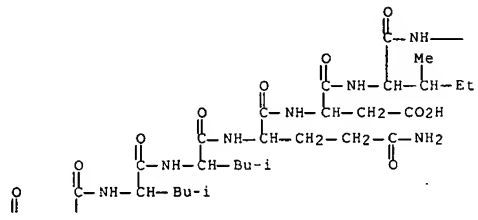

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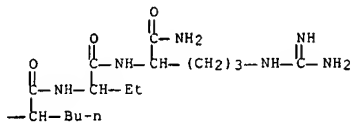

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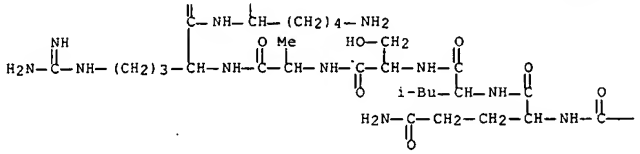

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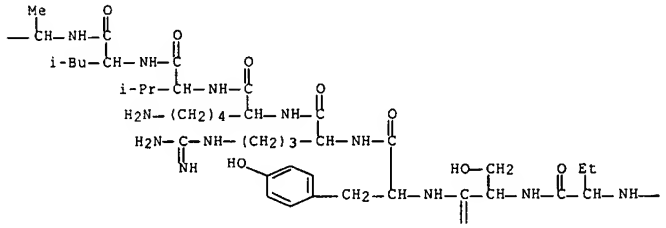

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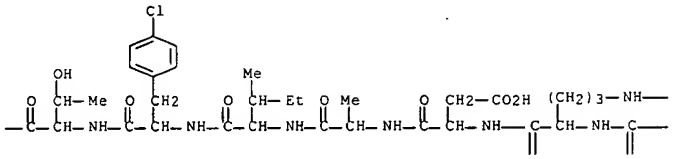

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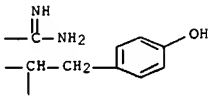

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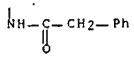
PAGE 3-C

PAGE 3-D



RN 190791-06-1 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(phenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-L-alanine-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIXSR

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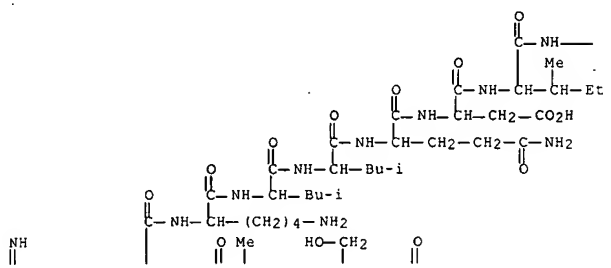

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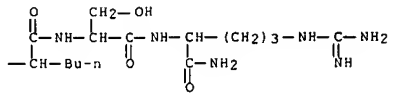

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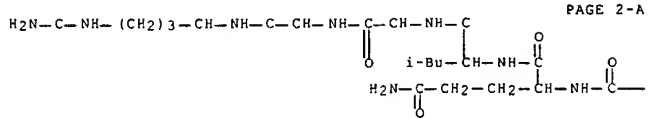

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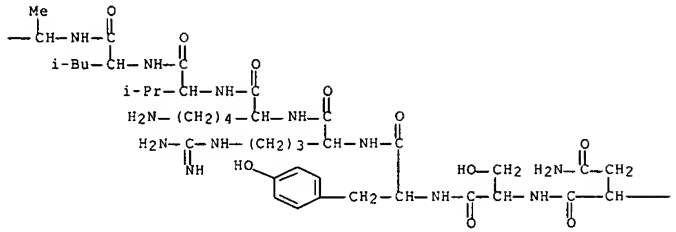

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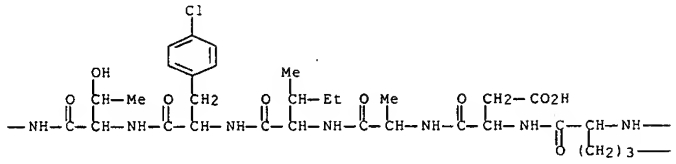

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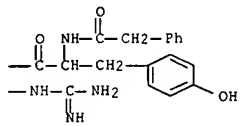

RN 190791-08-3 CAPLUS

CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-D-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

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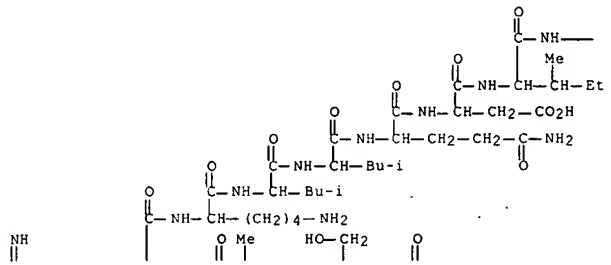

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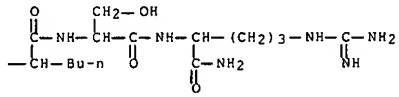

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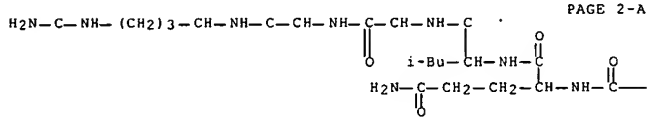

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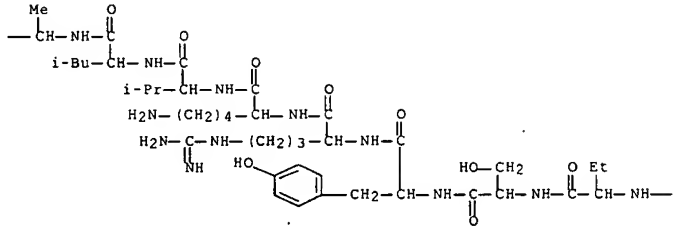

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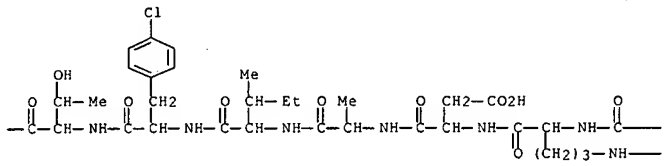

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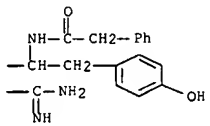

RN 198404-49-8 CAPLUS

CN L-Ornithinamide, N-(2-methyl-1-oxopropyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-L-asparaginyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-N5-(aminocarbonyl)- (9CI) (CA INDEX NAME)

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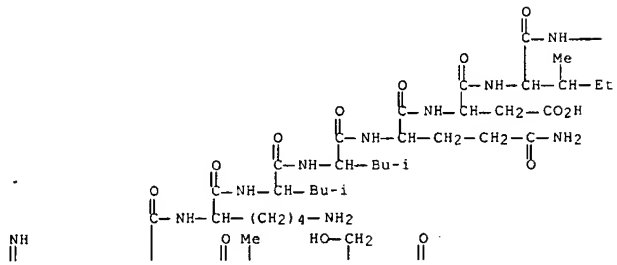

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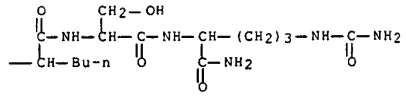

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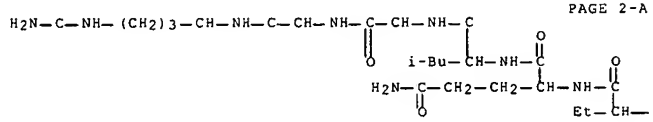

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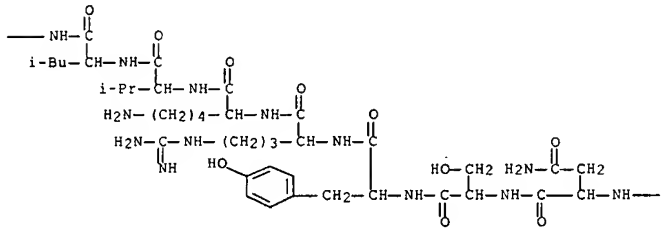

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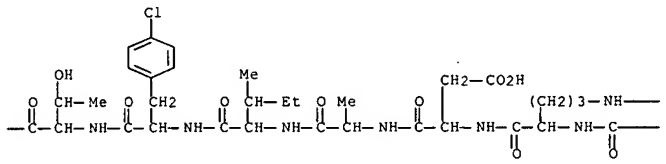

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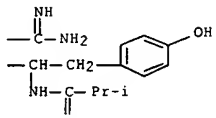

PAGE 3-D

RN 198404-52-3 CAPLUS

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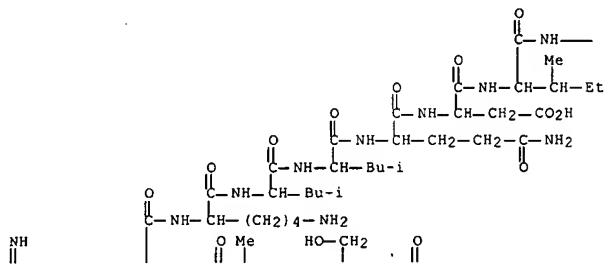

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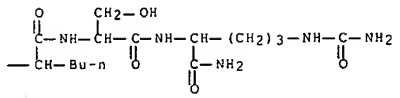

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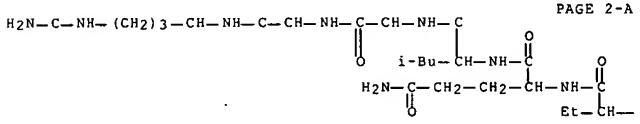

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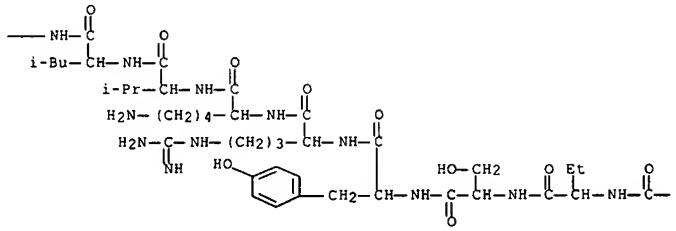

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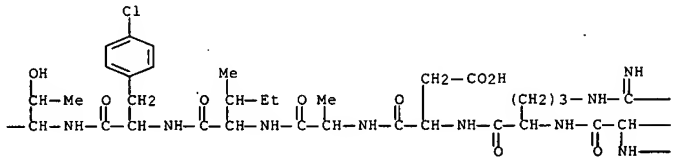

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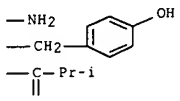

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RN 198404-55-6 CAPLUS

CN L-Ornithinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-(2S)-2-aminobutanoyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl-N5-(aminocarbonyl)- (9CI) (CA INDEX NAME)

NTE modified

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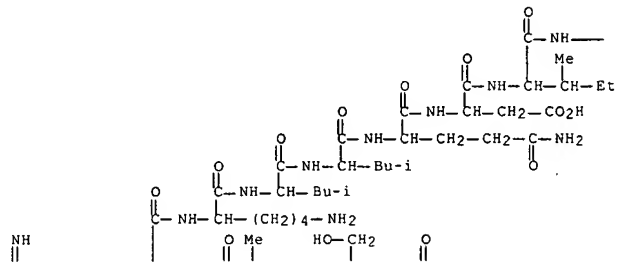

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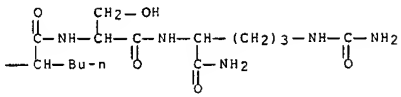

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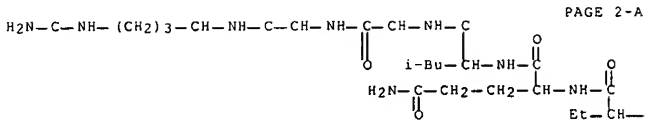

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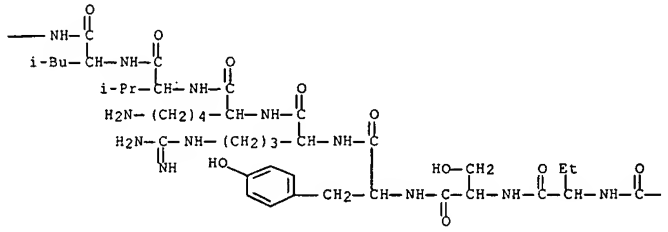

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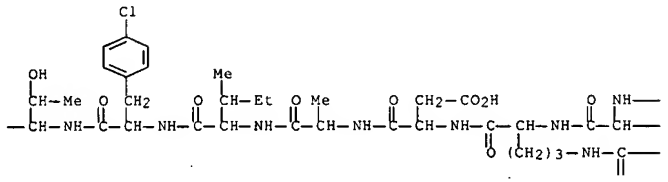

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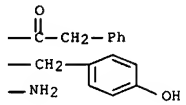

PAGE 3-C

RN 198404-60-3 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[O-methyl-N-(phenylacetyl)-L-tyrosine]-2-D-arginine-15-L-alanine-27-L-norleucine-29-L-argininamide-(9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIXSR

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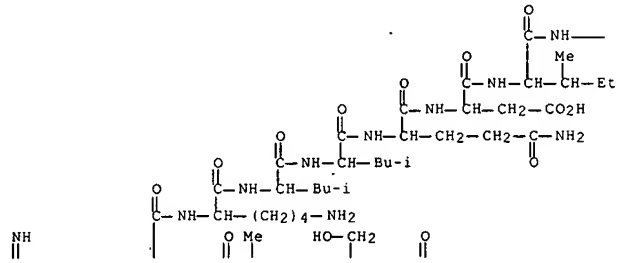

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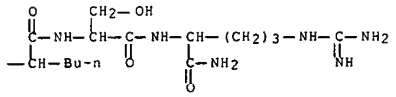

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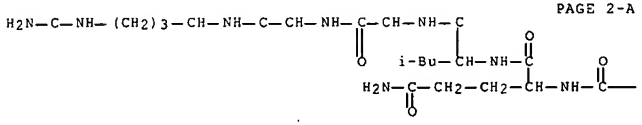

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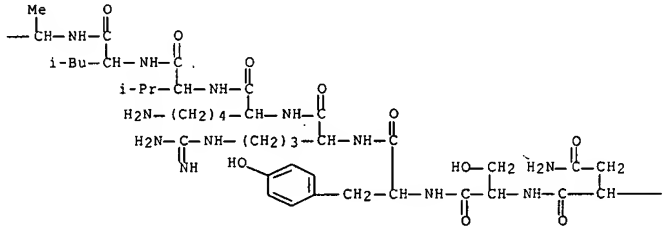

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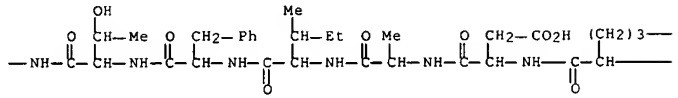

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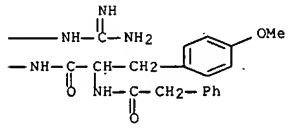

RN 198404-67-0 CAPLUS

CN L-Ornithinamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified

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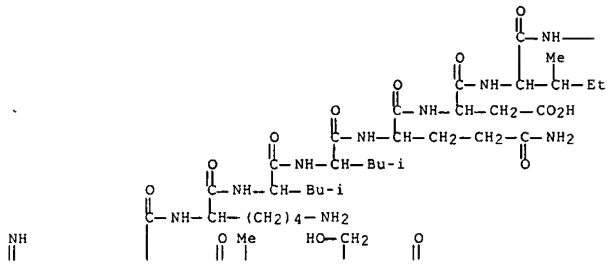

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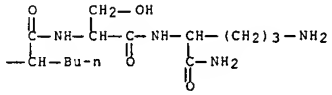

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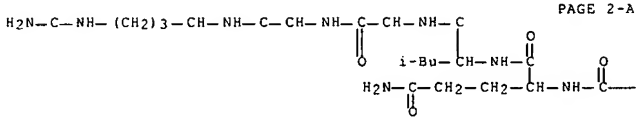

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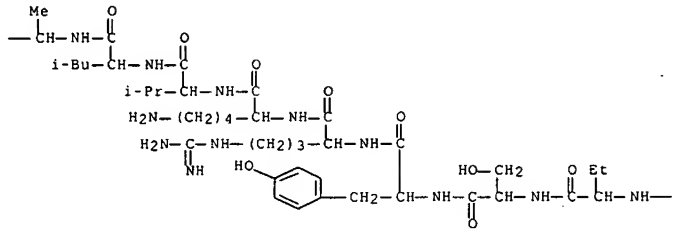

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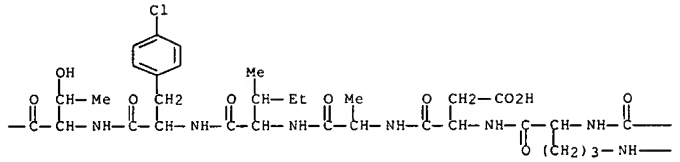

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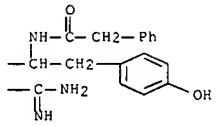

L23 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:294814 CAPLUS Full-text
DOCUMENT NUMBER: 127:29205
TITLE: Inhibition of GH release in rats by new potent antagonists of growth hormone-releasing hormone (GH-RH)
AUTHOR(S): Kovacs, Magdolna; Schally, Andrew V.; Zarandi, Marta; Groot, Kate
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute, Veterans Administration Medical Center and Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70146, USA
SOURCE: Peptides (Tarrytown, New York) (1997), 18(3), 431-438
CODEN: PPTDD5; ISSN: 0196-9781
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Biol. activity of a new series of potent GH-RH antagonists containing formyl or phenylacetyl group at the N-terminus of the sequence [D-Arg2,Phe(4-Cl)6,Nle27]hGH-RH(1-29)NH2, as well as various substitutions in positions 8, 15, or 28, and in some cases Agm in position 29, was evaluated in vivo. All five antagonists, administered at a 27-fold molar excess to rats, suppressed the GH-releasing effect of exogenous GH-RH(1-29)-NH2 by 64-75%. The inhibitory effects lasted for more than 15 min. The most potent analog, PhAc-[D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGH-RH(1- 28)Agm (MZ-5-156), showed an in vivo potency 7-16 times higher than the early antagonist [Ac-Tyr1,D-Arg2]hGH-RH(1-29)-NH2, which was used as standard, MZ-5-156 was capable of decreasing serum GH levels after i.v., i.p., or i.m. administration. In vitro, in the superfused rat pituitary cell system, MZ-5-156 induced a prolonged inhibition of GH release after continuous long-term administration and showed a potency more than 100 times greater than the standard antagonist. These results show that N-terminal acylation with phenylacetic acid of the sequence [D-Arg2,Phe(4-Cl)6,Nle27]hGH-RH(1-29)-NH2, containing modification in positions 8, 15, 28, or 29, results in antagonists with high and protracted potency both in vivo and in vitro. In view of high antagonistic activity and prolonged duration of action, some of these antagonists of GH-RH may find clin. application for the treatment of IGF-dependent cancers.

IT 93942-91-7 190783-58-5 190783-59-6
RL: PRP (Properties)
(growth hormone release inhibition in rats by antagonists of growth hormone-releasing hormone)

RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

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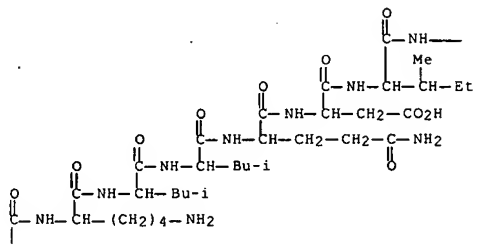

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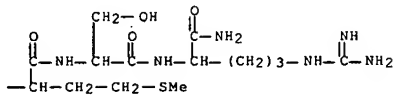

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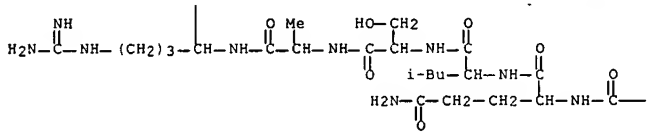

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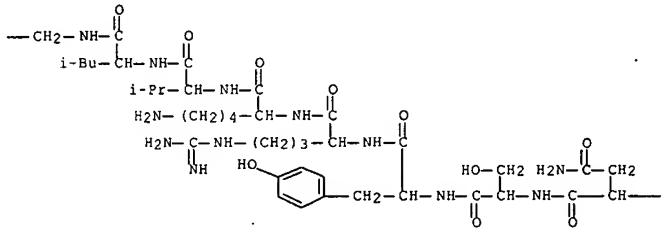

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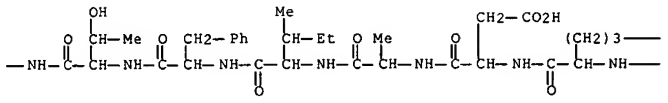

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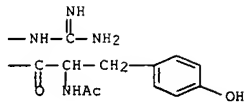

RN 190783-58-5 CAPLUS

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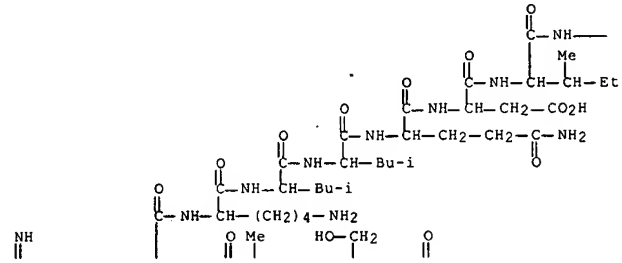

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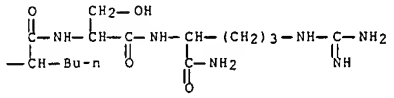

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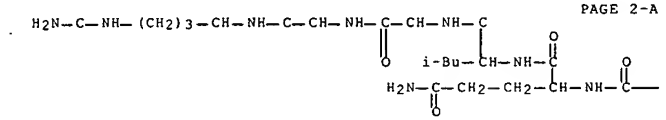

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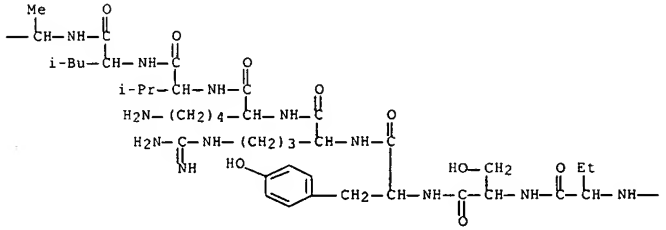

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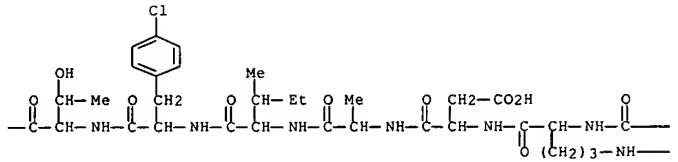

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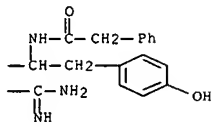

RN 190783-59-6 CAPLUS

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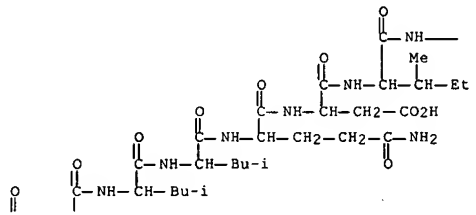

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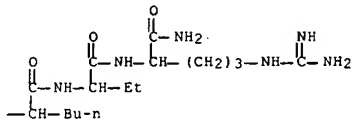

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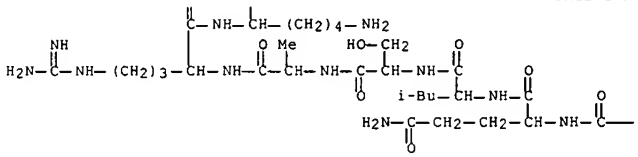

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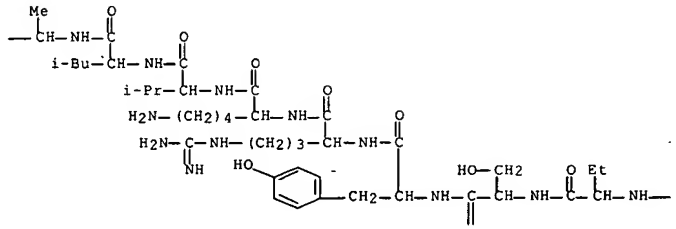

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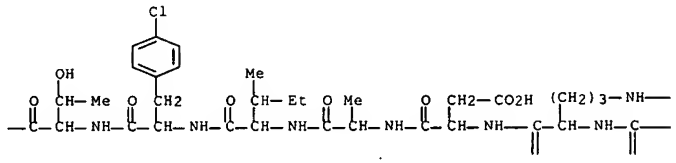

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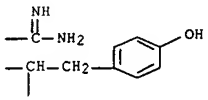

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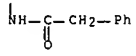
PAGE 3-D



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:294702 CAPLUS Full-text
DOCUMENT NUMBER: 127:76139
TITLE: Synthesis and in vitro evaluation of new potent antagonists of growth hormone-releasing hormone (GH-RH)
AUTHOR(S): Zarandi, Marta; Kovacs, Magdolna; Horvath, Judit E.; Toth, Katalin; Halmos, Gabor; Groot, Kate; Nagy, Attila; Kele, Zoltan; Schally, Andrew V.
CORPORATE SOURCE: Endocrine, Polypeptide and Cancer Institute and Department of Medicine, Tulane University School of Medicine, New Orleans, LA, 70146, USA

SOURCE: Peptides (Tarrytown, New York) (1997), 18(3), 423-430
CODEN: PPTDD5; ISSN: 0196-9781
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In the search for more potent antagonists of hGH-RH, 20 new analogs were synthesized, purified and tested in vitro. All the analogs were based on the N-terminal sequence of 28 or 29 amino acid residues of hGH-RH, but contained D-Arg2 and Nle27 modifications. Most analogs had Phe(pCl)6 and Agm29 substituents. The effect of other substitutions such as Abu8 and/or Abu15 and Ala15 and various hydrophobic and hydrophilic D or L amino acids at position 8 were also investigated. All the peptides were acylated at the N-terminus in an attempt to increase the antagonistic activity. In the superfused rat pituitary cell system, most analogs inhibited more powerfully the GH release induced by GH-RH than the standard antagonist [Ac-Tyr1,D-Arg2]hGH-RH (1-29)-NH2. Some antagonists were long acting. Among the peptides synthesized, antagonist PhAc-[D- Arg2,Phe(pCl)6,Abu1,Nle27]hGH-RH(1-28)Agm (MZ-5-156) appeared to be the most potent and inhibited GH release in vitro 63-200 times more powerfully than the standard antagonist. MZ-5-156 and other antagonists showed high binding affinities to membrane receptors for GH-RH. Some of these hGH-RH antagonists could be further developed for possible oncol. applications.

IT 93942-91-7 190783-58-5 190783-59-6
190791-06-1 190791-07-2 190791-08-3
190975-92-9
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(growth hormone-releasing hormone antagonist in vitro evaluation in relation to structure and receptor binding)

RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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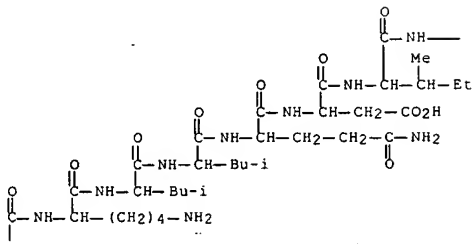

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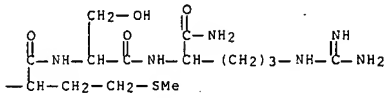

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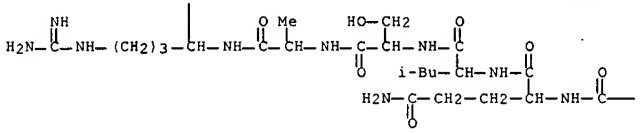

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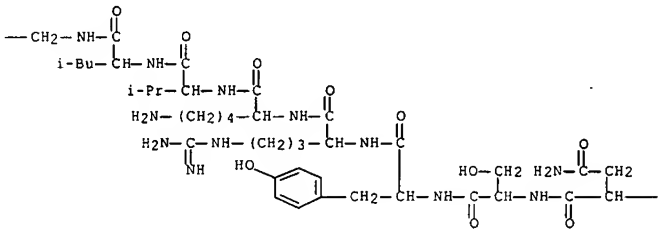

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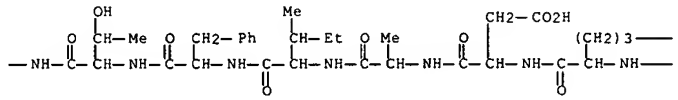

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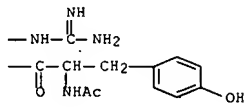

RN 190783-58-5 CAPLUS

CN L-Argininamide, N-(phenylacetyl)-L-tyrosyl-D-arginyl-L-α-aspartyl-L-alanyl-L-isoleucyl-4-chloro-L-phenylalanyl-L-threonyl-(2S)-2-aminobutanoyl-L-seryl-L-tyrosyl-L-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-norleucyl-L-seryl- (9CI) (CA INDEX NAME)

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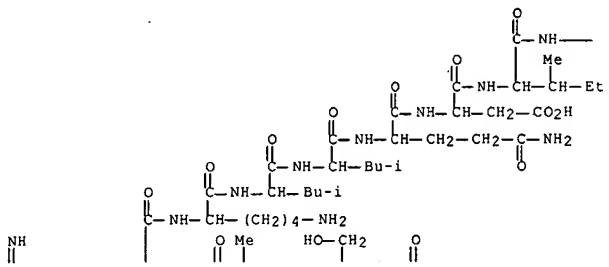

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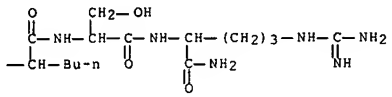

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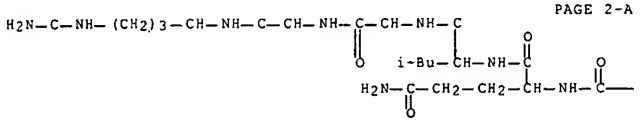

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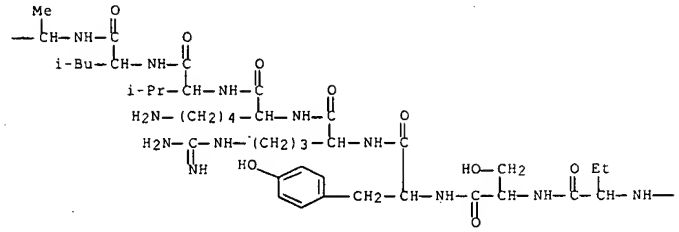

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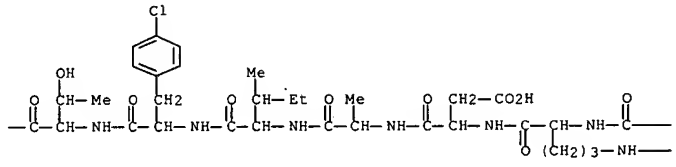

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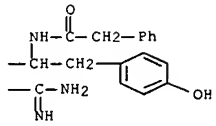

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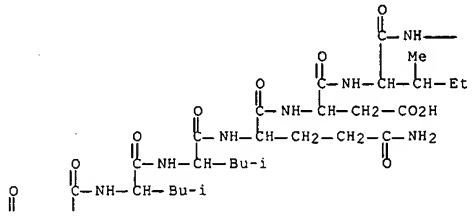

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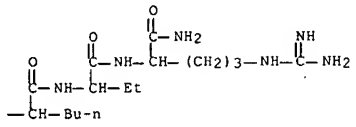

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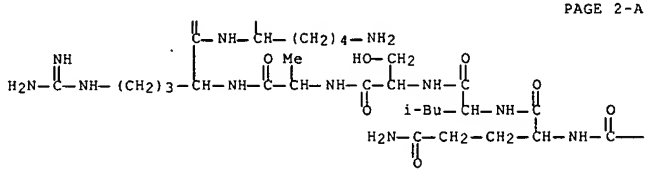

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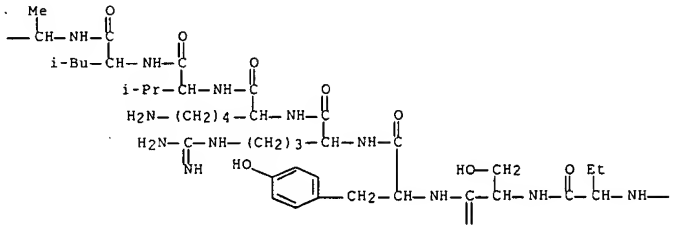

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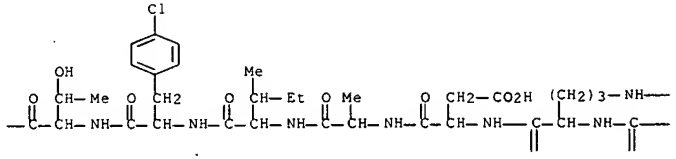

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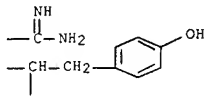

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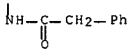

RN 190791-06-1 CAPLUS
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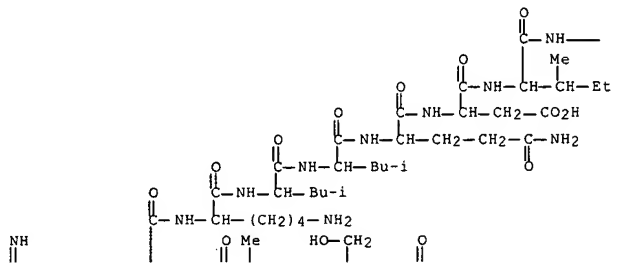

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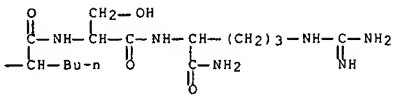

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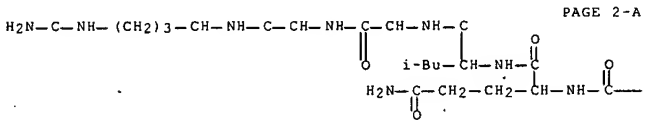

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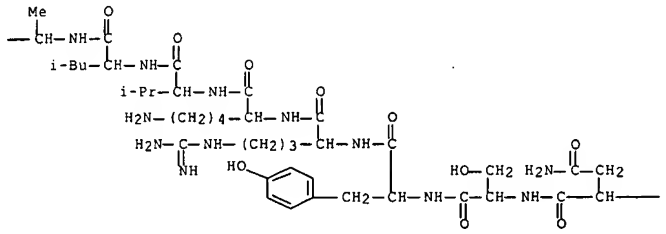

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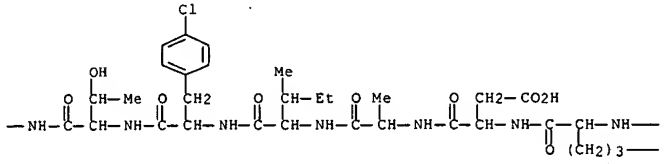

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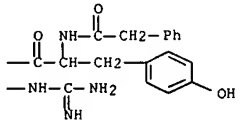

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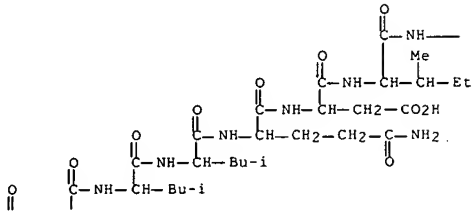

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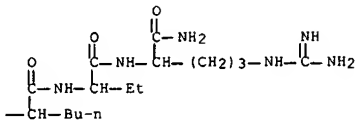

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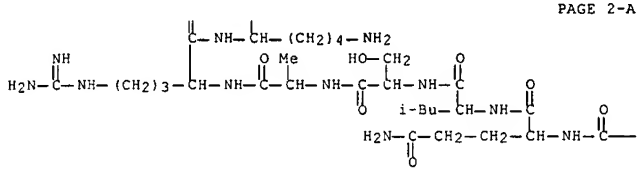

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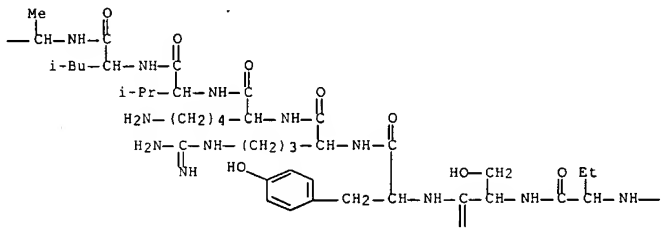

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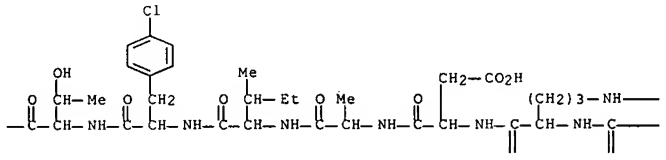

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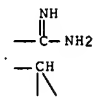

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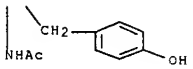

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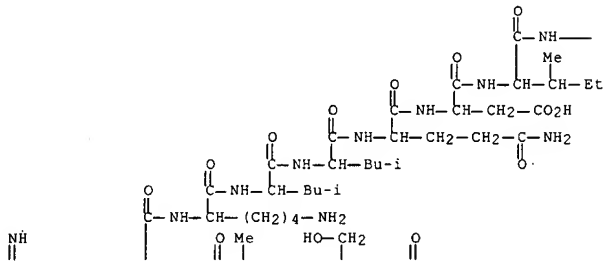

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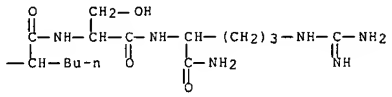

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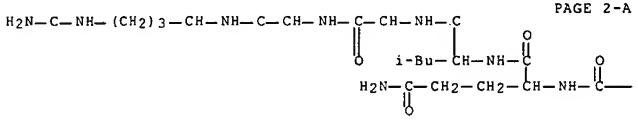

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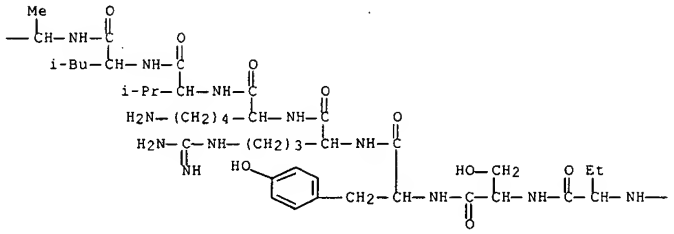

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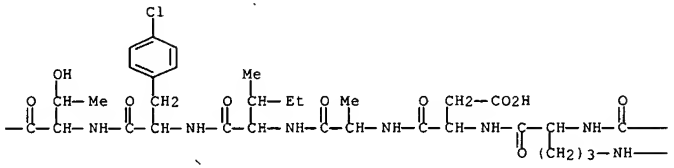

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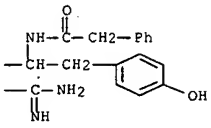

RN 190975-92-9 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[O-methyl-N-(phenylacetyl)-L-tyrosine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-L-alanine-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIXSR

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:101825 CAPLUS Full-text
DOCUMENT NUMBER: 126:181577
TITLE: Suppression of growth hormone (GH) hypersecretion due to ectopic GH-releasing hormone (GHRH) by a selective GHRH antagonist
AUTHOR(S): Jaffe, Craig A.; DeMott-Frigerg, Roberta; Frohman, Lawrence A.; Barkan, Ariel L.
CORPORATE SOURCE: Department of Internal Medicine, Divisions of Endocrinology and Metabolism, Department of Verterans Affairs Medical Center, University of Michigan Medical Center, Ann Arbor, MI, 48109, USA
SOURCE: Journal of Clinical Endocrinology and Metabolism (1997), 82(2), 634-637
CODEN: JCEMAZ; ISSN: 0021-972X
PUBLISHER: Endocrine Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have recently demonstrated that a competitive antagonist of GHRH, (N-Ac-Tyr1,D-Arg2)GHRH-(1-29)NH2 (GHRH-Ant), eliminates nearly all nocturnal GH pulsatility in normal subjects, supporting the hypothesis that GH pulsatility is driven by GHRH. In this study, the authors compared the effects of every 12 h i.v. boluses of either GHRH-Ant or saline on 24-h GH profiles in a patient with acromegaly due to a metastatic GHRH-secreting carcinoid tumor. Bolus doses of GHRH-Ant (400 µg/kg, i.v.) acutely suppressed GH concentration to 30-40% of the pretreatment baseline, and this effect lasted 3-4 h. Administration of GHRH (0.33 µg/kg,i.v.) bolus resulted in a small rise in GH, and this effect was blocked by GHRH-Ant (400 µg/kg). During saline treatment, the secretory patterns of both GH and ectopic GHRH were pulsatile; however, there was no correlation between changes in plasma GHRH and GH concns. This lack of correlation was probably due to the majority of circulating GHRH immunoreactivity consisting of nonbiol. active GHRH fragments. These data support the hypothesis that GH hypersecretion in the ectopic GHRH syndrome requires GHRH receptor occupancy and validates the use of GHRH-Ant to probe the potential involvement of endogenous GHRH in patients with acromegaly due to pituitary somatotropinoma.

IT 93942-91-7
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(suppression of growth hormone (GH) hypersecretion due to ectopic GH-releasing hormone (GHRH) by a selective GHRH antagonist)

RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-

argininamide- (9CI) (CA INDEX NAME)

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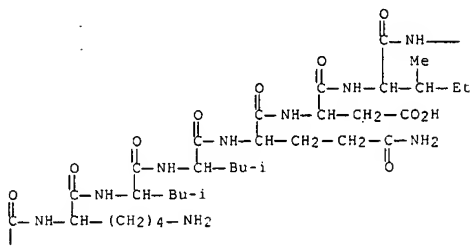

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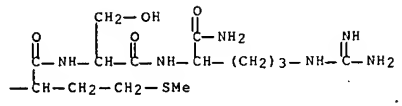

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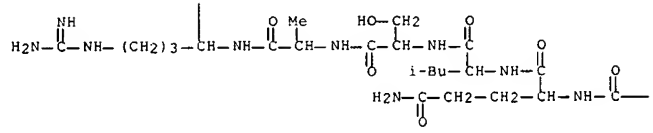

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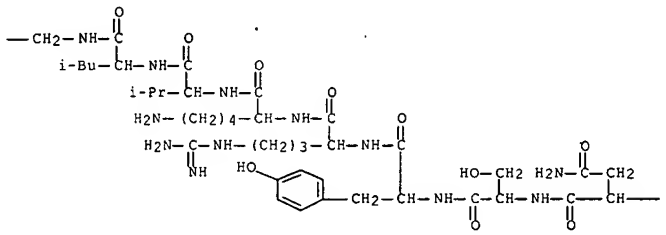

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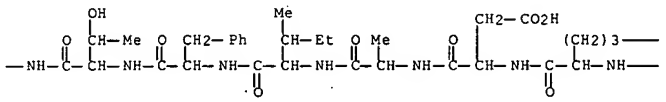

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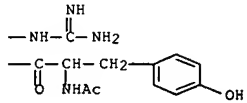

L23 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:300265 CAPLUS Full-text
DOCUMENT NUMBER: 124:333537
TITLE: The inhibitory effects of growth hormone-releasing hormone (GHRH)-antagonist on GHRH, L-DOPA, and clonidine-induced GH secretion in normal subjects
AUTHOR(S): Hanew, Kunihiko; Tanaka, Aki; Utsumi, Atsushi; Sugawara, Akira; Abe, Keishi
CORPORATE SOURCE: Second Department Internal Medicine, Tohoku University School Medicine, Sendai, 980, Japan
SOURCE: Journal of Clinical Endocrinology and Metabolism (1996), 81(5), 1952-1955
CODEN: JCEMAZ; ISSN: 0021-972X
PUBLISHER: Endocrine Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The relative inhibitory potency of GHRH-Antagonist (GHRH-Ant) to GHRH(1-44)NH2 and mechanism of L-DOPA- or clonidine-induced GH release were studied in seven normal subjects using GHRH-Ant. One hundred micrograms of GHRH-Ant (i.v. for 75 min) did not inhibit plasma GH responses to bolus injection of 100 μg and 10 μg GHRH or simultaneous infusion of 5 μg GHRH (i.v. for 75 min). However, 200 μg GHRH-Ant (i.v. for 75 min) significantly inhibited GH release, which was induced by simultaneous infusion of 5 μg GHRH. Although 100 μg GHRH-Ant could not significantly inhibit L-DOPA-induced GH release, 200 μg GHRH-Ant almost completely inhibited the response. Similarly, the same dose f GHRH-Ant markedly inhibited the GH-releasing activity of clonidine. It is concluded that the inhibitory potency of GHRH-Ant on GHRH(1-44)NH2 is relatively weak (about 1/60 in molar base), and that L-DOPA- or clonidine-induced GH release seems to be mediated by the release of hypothalamic GHRH.

IT 93942-91-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(the inhibitory effects of growth hormone-releasing hormone (GHRH)-antagonist on GHRH, L-DOPA, and clonidine-induced GH secretion in normal subjects)

RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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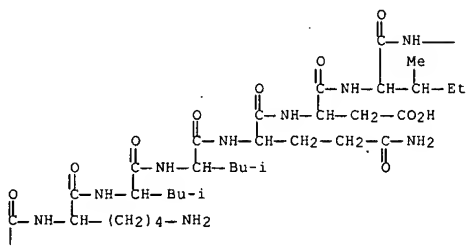

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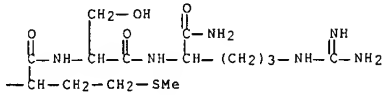

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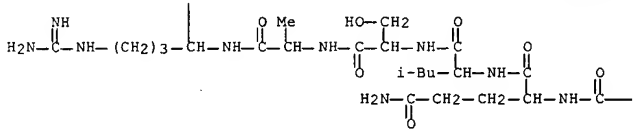

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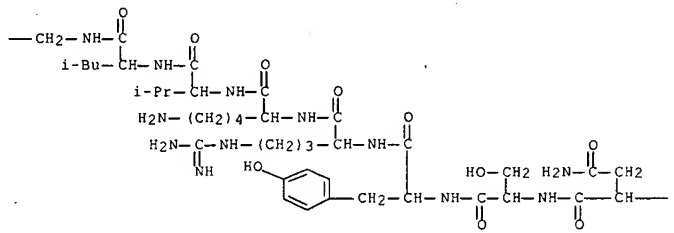

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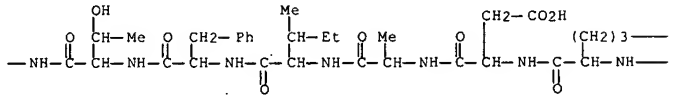
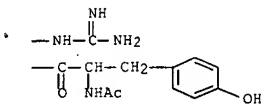




L23 ANSWER 30 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:75144 CAPLUS Full-text
DOCUMENT NUMBER: 124:107207
TITLE: Plasma GH responses to human GHRH-antagonist in normal subjects
AUTHOR(S): Hanew, Kunihiko; Tanaka, Aki; Utsumi, Atsushi; Sugawara, Akira; Abe, Keishi
CORPORATE SOURCE: Second Dep. Internal Medicine, Tohoku Univ. School Medicine, Sendai, Japan
SOURCE: European Journal of Endocrinology (1996), 134(1), 67-72
CODEN: EJOEEP; ISSN: 0804-4643
PUBLISHER: Scandinavian University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

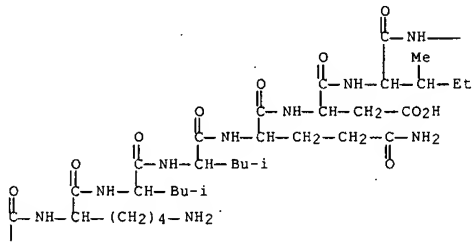
AB The effect of GH-RH-antagonist {(N-Ac-Tyr1,D-Arg2)-GH-RH-(1-29)-NH2} on plasma GH morning and evening secretion was evaluated in 14 normal subjects (10 males, 4 females, aged 19-25 yr). Plasma GH was determined using a high sensitivity IRMA kit (detection limit, 0.006 μg/L). After i.v. infusion of GH-RH-antagonist (100 μg/100 mL saline over 75 min) in the morning, plasma GH remained constant during the 150 min post-infusion. In contrast, when GH-RH-antagonist was administered in the evening, plasma GH showed a clear and gradual decrease through the initial 90 min and returned to baseline levels at 150 min. Plasma GH values were also significantly lower from 75 min to 135 min when compared to physiol. fluctuations in plasma GH. Other anterior pituitary hormones remained unaffected by GH-RH-antagonist. In conclusion, the data suggest that evening basal GH secretion, but not morning GH secretion, is maintained by endogenous GH-RH.

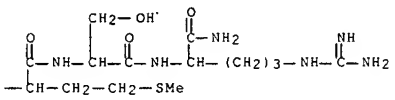
IT 93942-91-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(plasma growth hormone responses to human GH-RH antagonist in normal subjects)

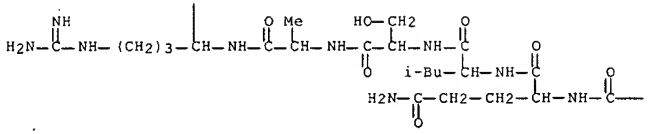
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR







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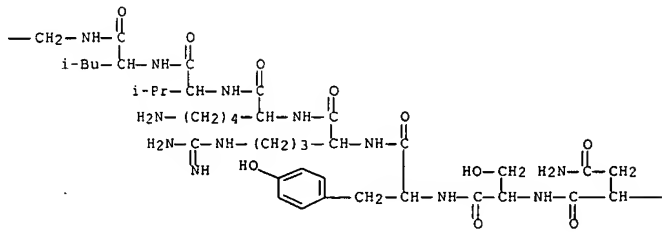

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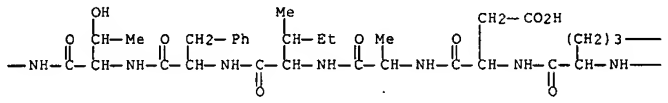

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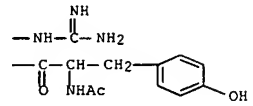

L23 ANSWER 31 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:1002215 CAPLUS Full-text
DOCUMENT NUMBER: 124:21956
TITLE: Characterization of growth hormone-releasing hormone (GH-RH) binding to cloned porcine GH-RH receptor
AUTHOR(S): Hassan, Hazem A.; Hsiung, Hansen M.; Zhang, Xing-Yue; Smith, Dennis P.; Smiley, David L.; Heiman, Mark L.
CORPORATE SOURCE: Div. Endocrinology, Eli Lilly and Co., Indianapolis, IN, 46285, USA
SOURCE: Peptides (Tarrytown, New York) (1995), 16(8), 1469-73
CODEN: PPTDD5; ISSN: 0196-9781
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To study structure-activity relations of GH-RH, a competitive binding assay was developed using cloned porcine adenopituitary, GH-RH receptors expressed in human kidney 293 cells. Specific binding of [His1,125I-Tyr10,Nle27]hGH-RH-(1-32)-NH2 increased linearly with protein concentration (10-45 μg protein/tube). Binding reached equilibrium after 90 min at 30° and remained constant for at least 240 min. Binding was reversible to 1 class of high-affinity sites (Kd = 104 nM, Bmax = 3.9 pmol/mg protein). Binding was selective with a rank order of affinity (IC50) for porcine GH-RH (2.8 nM), rat GH-RH (3.1 nM), [N-Ac-Tyr1,D-Arg2]hGH-RH(3-29)-NH2 (3.9 nM), and [D-Thr7]GH-RH(1-29)-NH2 (189.7 nM), consistent with their binding to GH-RH receptor. Nonhydrolyzable guanine nucleotides inhibited binding. These data describe a selective and reliable method for a competitive GH-RH binding assay that for the first time utilizes rapid filtration to terminate the binding assay.

IT 93942-91-7
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(characterization of growth hormone-releasing hormone binding to cloned porcine GH-RH receptor)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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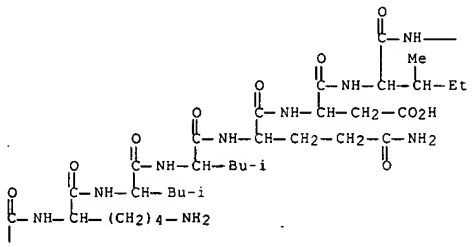

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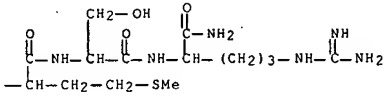

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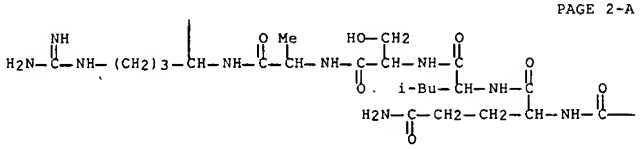

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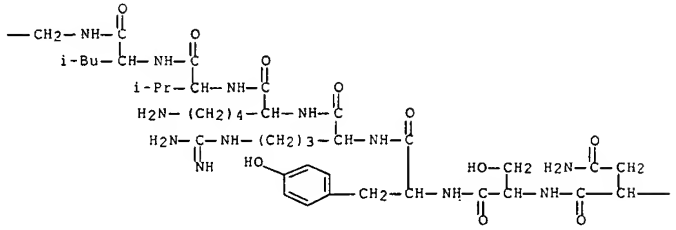

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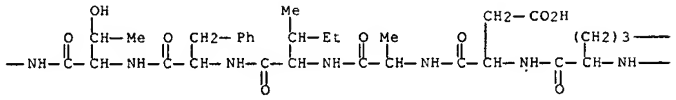

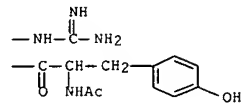

L23 ANSWER 32 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:960194 CAPLUS Full-text
DOCUMENT NUMBER: 124:87800
TITLE: Preparation of analogs of human growth hormone releasing hormone hGH-RH(1-29)NH2 having antagonistic activity for hGH-RH
INVENTOR(S): Schally, Andrew V.; Zarandi, Marta
PATENT ASSIGNEE(S): Administrators of the Tulane Educational Fund, USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9516707	A1	19950622	WO 1994-US13714	19941128 <--
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5550212	A	19960827	US 1993-168810	19931217 <--
CA 2178218	A1	19950622	CA 1994-2178218	19941128 <--
AU 9513322	A	19950703	AU 1995-13322	19941128 <--
AU 695315	B2	19980813		
EP 734396	A1	19961002	EP 1995-904767	19941128 <--
EP 734396	B1	20001108		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
ES 2152380	T3	20010201	ES 1995-904767	19941128 <--
PT 734396	T	20010430	PT 1995-904767	19941128 <--
ZA 9409641	A	19950825	ZA 1994-9641	19941205 <--
GR 3035170	T3	20010430	GR 2000-402857	20001229 <--
PRIORITY APPLN. INFO.:			US 1993-168810 A	19931217 <--
			WO 1994-US13714 W	19941128 <--

OTHER SOURCE(S): MARPAT 124:87800
AB Analogs of hGH-RH(1-29)NH2 having substitutions of various amino acids and acylated at the N-terminus X-R1-R2-R3-R4-R5-R6-Thr-R8-Ser-Tyr-R11-R12-Val-

Leu-R15-Gln-Leu-Ser-R19-R20-R21-Leu-Leu-Gln-Asp-Ile-R27-R28-R29 [X = nil, H, Ac, ICH2CO, BrCH2CH2CO, CHO, Me2CHCH2CO, 1- or 2-naphthylacetyl, 1- or 2-naphthoyl, 1- or 2-naphthylpropionyl, anthraquinone-2-carbonyl; R1 = Tyr, His, Glu, glutaryl; R2 = D-Arg, D-Cit (citrulline), D-homoArg, D-Lys, D-Orn; R3 = Asp, Ala, Gly; R4 = Ala, Gly; R5 = Ile, Ala, Gly; R6 = Phe, Ala, Pro, 2,3,4,9-tetrahydro-1H-pyrido[3,4-b]indole-3-carboxylic acid, 2-naphthylalanine, Phe(Y), in which Y = F, Cl, Br, NO2, Me, or OCH3; R8 is Asn, Ser, Val, Ile, Ala, Abu (α-aminobutyric acid), Nle, α-aminoisobutyric acid; R11 = Arg, D-Arg, Cit; R12 = Lys, D-Lys, Cit, Ala; R15 = Gly, Ala, Abu, Gln; R19 = Ala, Abu; R20 = Arg, D-Arg, Cit; R21 = Lys, D-Lys, Cit; R27 = Met, Nle, Abu; R28 = Ser, Asn, Asp, Abu; R29 = agmatine, Arg-NH2, Arg-OH, Cit-NH2, Cit-OH, homoArg-NH2, homoArg-OH; provided that when R1 is glutaryl, X is nil and When X is H, R15 is other than Gly] and pharmaceutically acceptable acid addition salts thereof, which inhibit the release of hGH from the pituitary in mammals and exhibit prolonged antagonistic activity, are prepared Thus, Nac-Tyr-D-Asp-Ala-Ile- Phe(p-Cl)-Thr-Asn-Ser-Tyr-Arg-Lys-Val-Leu-Abu-Gln-Leu-Ser-Ala-Arg-Lys-Leu- Leu-Gln-Asp-Ile-Nle-Ser-Agm-OH (I; Nac = 1-naphthylacetyl, Agm = agmatine) was prepared by the solid phase method using Boc-Agm-SPA-aminomethyl resin (California Peptide Co.) and N-Boc-protected amino acids and acylation of the resin-bound peptide with 1-naphthylacetic anhydride on the NH2 group of Tyr. I in vitro at 30 nM inhibited the GH release from rat superfused pituitary system by 96, 98, and 48% 2, 4.5, and 6 h after the incubation, resp.

IT 160361-93-3P 160361-94-4P 160361-95-5P
160499-35-4P 160499-40-1P 171047-66-8P
171047-67-9P 171047-68-0P 171047-69-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of human growth hormone releasing hormone (hGH-RH) analogs as hGH-RH antagonists and inhibitors of hGH release from pituitary gland)

RN 160361-93-3 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-(N-acetyl-L-histidine)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

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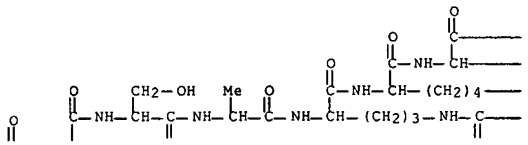

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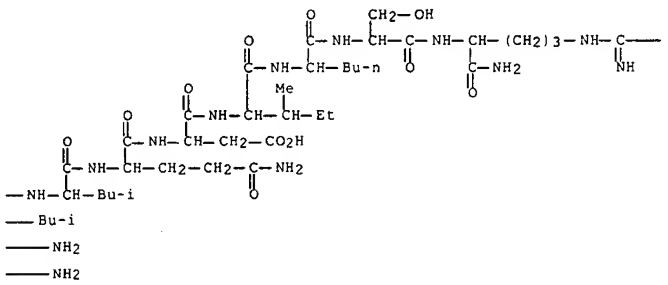

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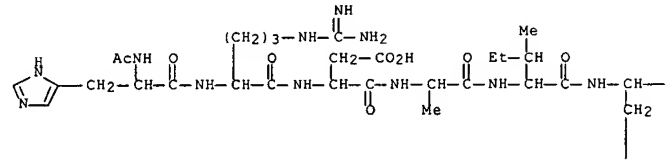

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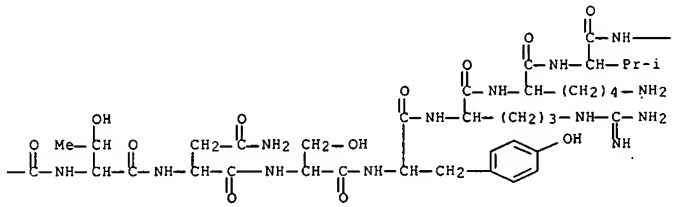

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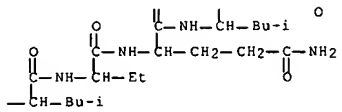

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RN 160361-94-4 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(2-methyl-1-oxopropyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HRDAIFTNSY RKVLXQLSAR KLLQDIXSR

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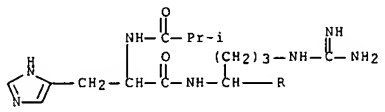

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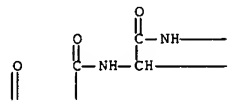

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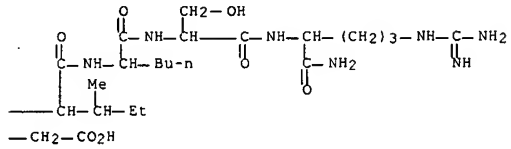

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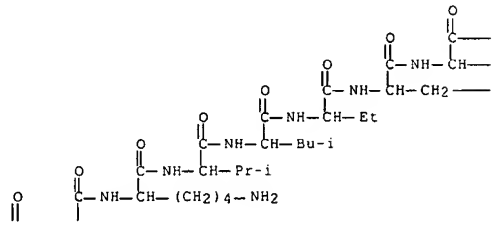

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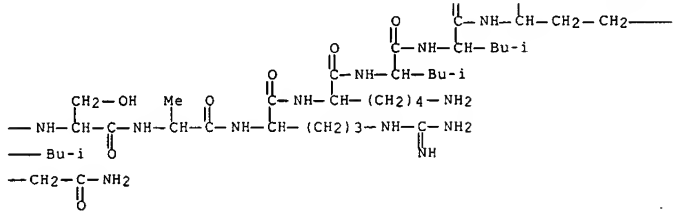

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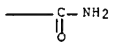

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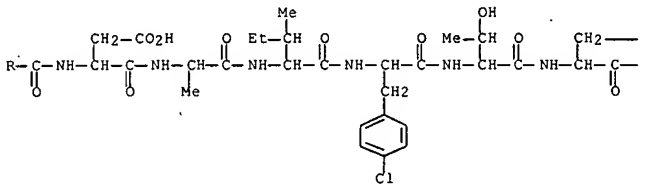

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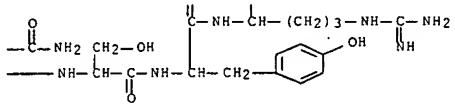

RN 160361-95-5 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(iodoacetyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

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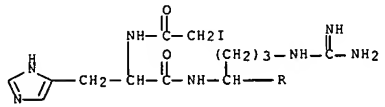

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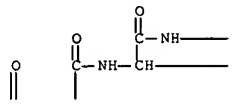

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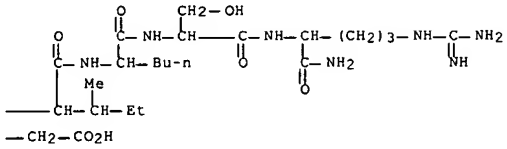

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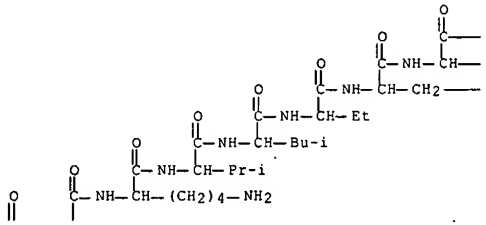

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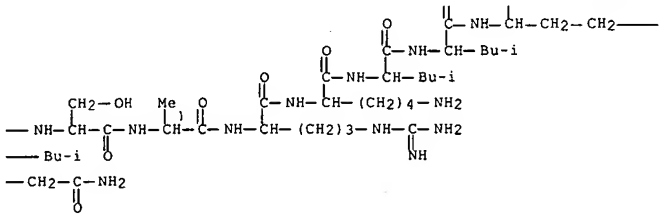

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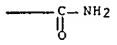

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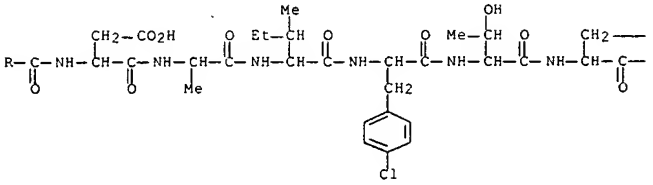

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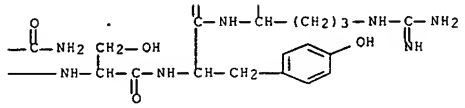

RN 160499-35-4 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(1-naphthalenylacetyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 160499-40-1 CAPLUS
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NTE modified (modifications unspecified)

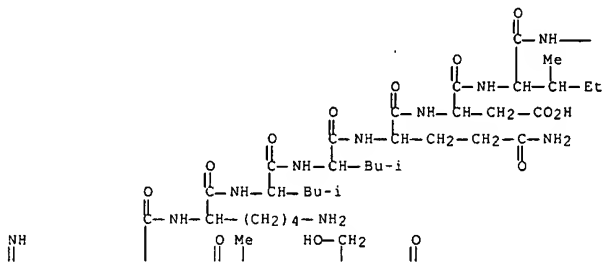
SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 171047-66-8 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(2-methyl-1-oxopropyl)-2-D-arginine-8-(2-methylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTXSY RKVLXQLSAR KLLQDIXSR

PAGE 1-A



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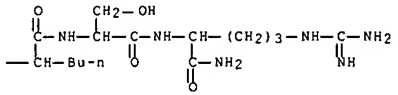

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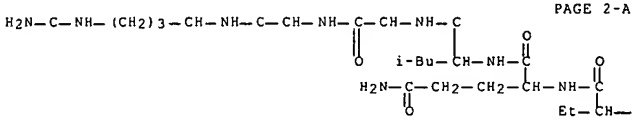

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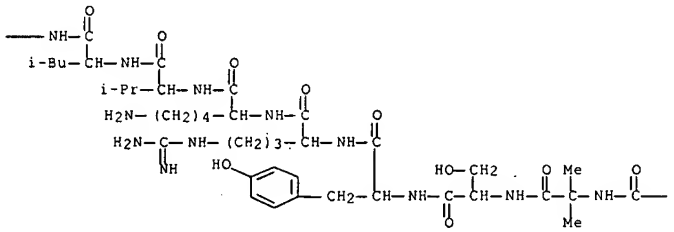

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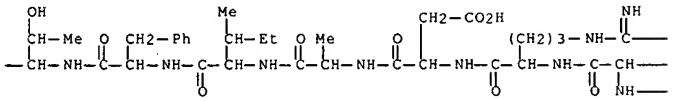

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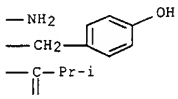

PAGE 3-D

RN 171047-67-9 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(2-methyl-1-oxopropyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-8-(2-methylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

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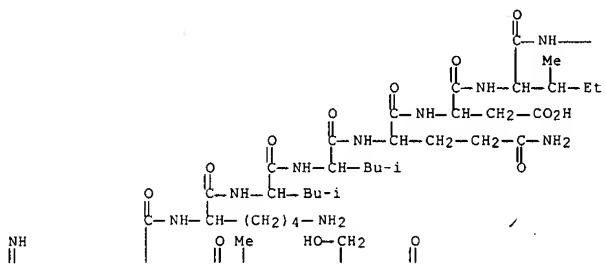

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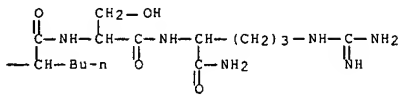

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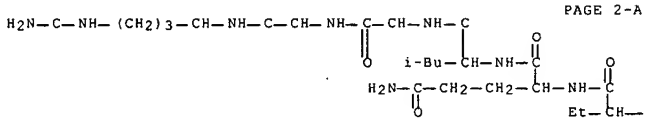

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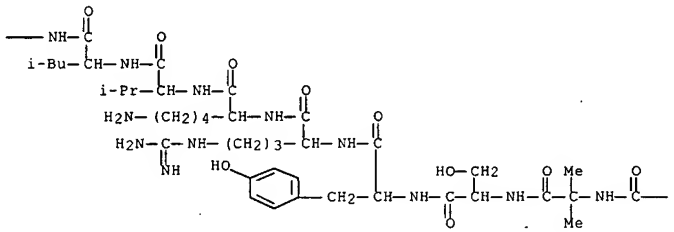

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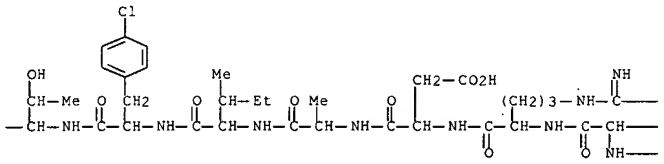

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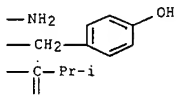

PAGE 3-D

RN 171047-68-0 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(2-methyl-1-oxopropyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-12-L-alanine-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RAVLXQLSAR KLLQDIXSR

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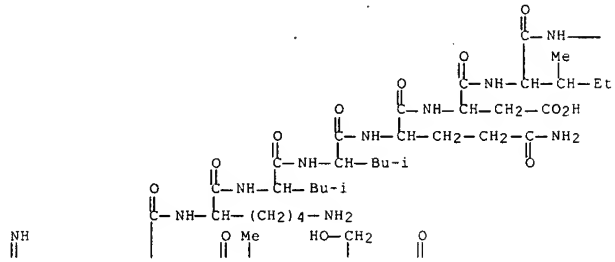

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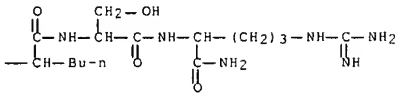

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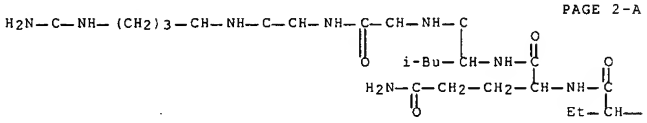

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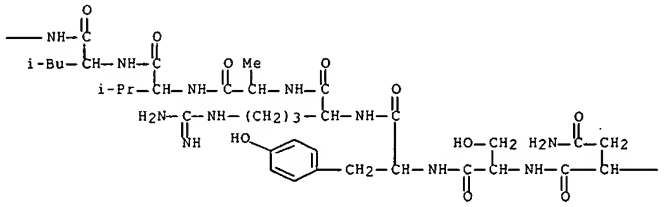

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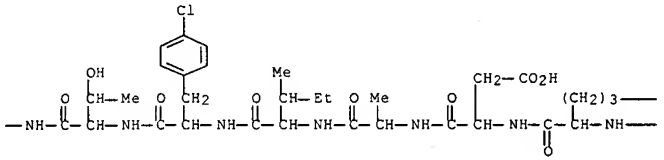

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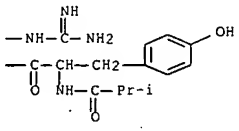

RN 171047-69-1 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(2-methyl-1-oxopropyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-19-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLXQLSXR KLLQDIXSR

Absolute stereochemistry.

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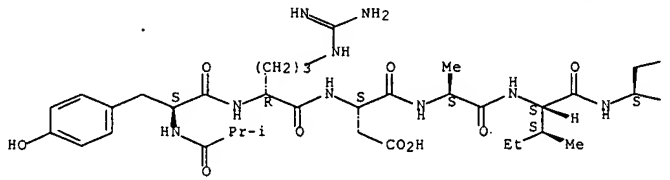

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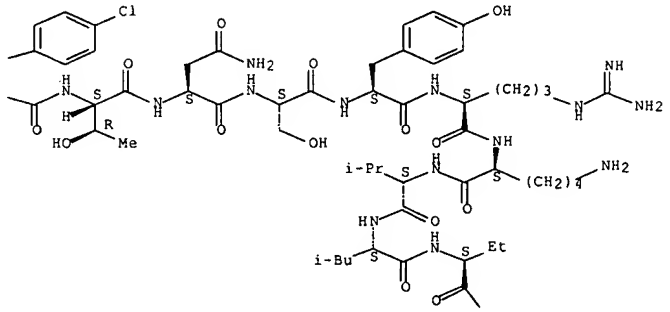

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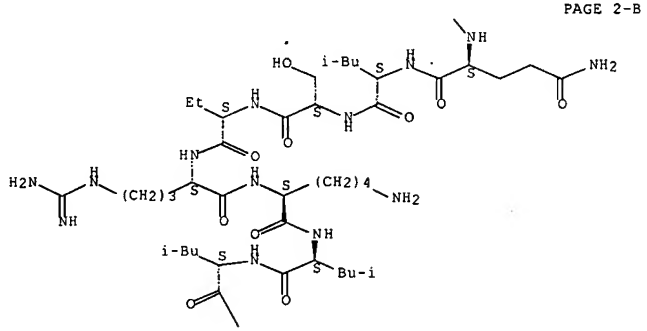

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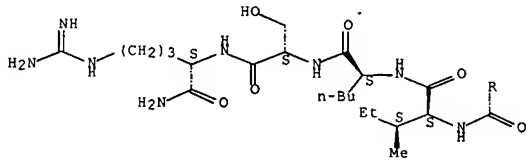

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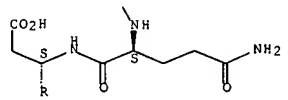

L23 ANSWER 33 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:259031 CAPLUS Full-text
DOCUMENT NUMBER: 122:96644
TITLE: Synthesis and biological activities of highly potent antagonists of growth hormone-releasing hormone

AUTHOR(S): Zarandi, M.; Horvath, J. E.; Halmos, G.; Pinski, J.; Nagy, A.; Groot, K.; Rekasi, Z.; Schally, A. V.
CORPORATE SOURCE: Vet. Affairs Med. Cent., Tulane Univ. Sch. Med., New Orleans, LA, 70146, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1994), 91(25), 12298-302
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In the search for antagonists of human growth hormone-releasing hormone (hGHRH) with high activity, 22 analogs were synthesized by solid-phase methods, purified, and tested biol. Within the N-terminal sequence of 28 or 29 amino acids of hGHRH, all the analogs contained D-Arg2,Phe(4-Cl)6 (para-chlorophenylalanine), Abu15 (α-aminobutyric acid), and Nle27 and most of them had Agm29 (agmatine) substituents. All the peptides, except one, were acylated at the N terminus with different hydrophobic acids-e.g., isobutyric acid (Ibu) or I-naphthylacetic acid (Nac) to study the effect of N-terminal acylation on the antagonistic activity. In the superfused rat pituitary cell system, all the analogs inhibited more powerfully the GHRH-induced growth hormone (GH) release than the standard GHRH antagonist [Ac-Tyr1,D-Arg2]hGHRH-(1-29)NH2. Antagonists [Ibu9,D-Arg2,Phe(4-Cl)6, Abu15,Nle27]hGHRH-(1-28)Agm (MZ-4-71), [Nac10,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-28)Agm (MZ-4-243), [Nac0,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-29)NH2 (MZ-4-169), [Nac0-His1,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-29)NH2 (MZ-4-181), and [Nac10,D-Arg2,Phe(4-Cl)6,Abu15,Nle27,Asp28]hGHRH-(1-28)Agm (MZ-4-209) inhibited GH release at 3+10-9 M. Among these peptides, MZ-4-243, MZ-4-169, and MZ-4-181 were also long acting in vitro. Antagonist MZ-4-243 inhibited GH release 100 times more powerfully than the standard antagonist and was the most potent in vitro among GHRH antagonists synthesized. Analogs with high inhibitory effects in vitro were also found to have high affinities to rat pituitary GHRH receptors. In expts. in vivo, antagonists [Ibu0,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-28)Agm (MZ-4-71), [Nac0,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-29)NH2 (MZ-4-169), and [Nac0-His1,D-Arg2,Phe(4-Cl)6,Abu15,Nle27]hGHRH-(1-29)NH2 (MZ-4-181) induced a significantly greater inhibition of GH release than the standard antagonist. In view of their high antagonistic activity and prolonged duration of action, some of these antagonists of GHRH may find clin. applications, including treatment of certain endocrine disorders and insulin-like growth factor I-dependent tumors.

IT 160361-93-3 160361-94-4 160361-95-5
160499-35-4 160499-40-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(synthesis and biol. activities of highly potent antagonists of growth hormone-releasing hormone)

RN 160361-93-3 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), 1-(N-acetyl-L-histidine)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

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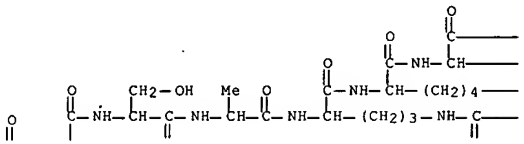

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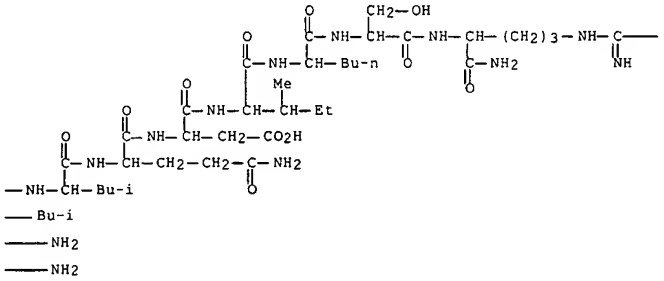

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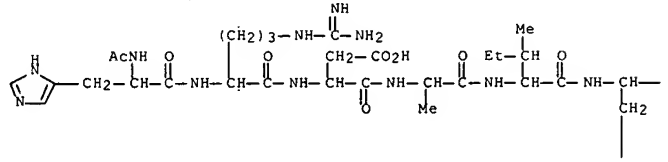
PAGE 2-A



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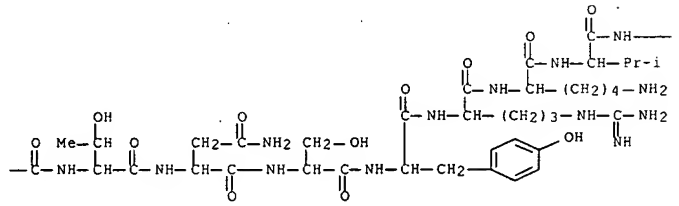

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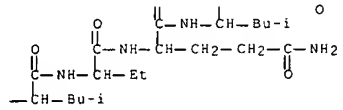

PAGE 3-A

RN 160361-94-4 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(2-methyl-1-oxopropyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HRDAIFTNSY RKVLXQLSAR KLLQDIXSR

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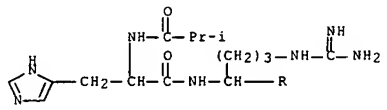

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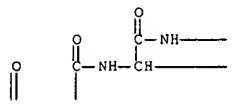

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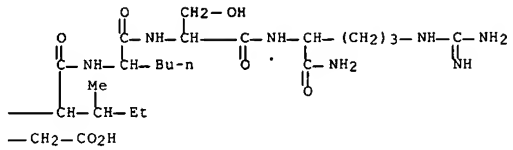

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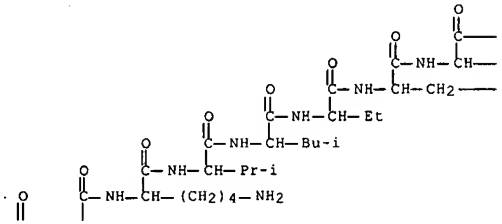

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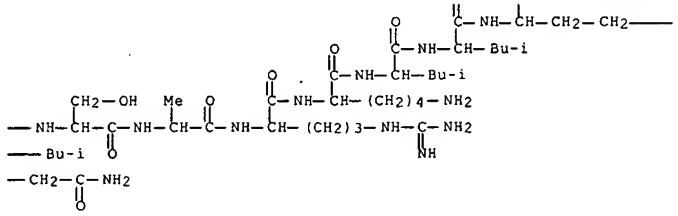

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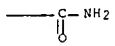

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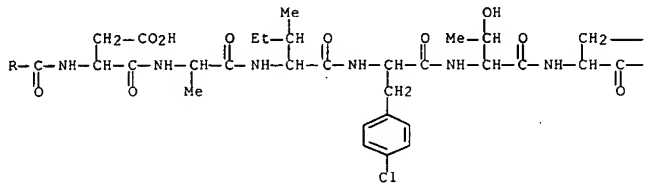

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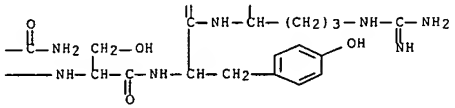

RN 160361-95-5 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(iodoacetyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 HRDAIFTNSY RKVLXQLSAR KLLQDIXSR

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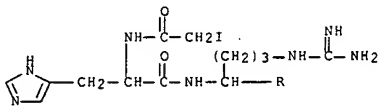

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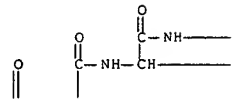

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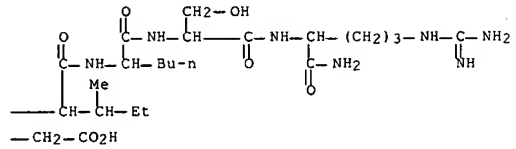

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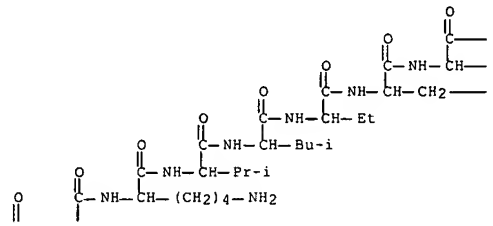

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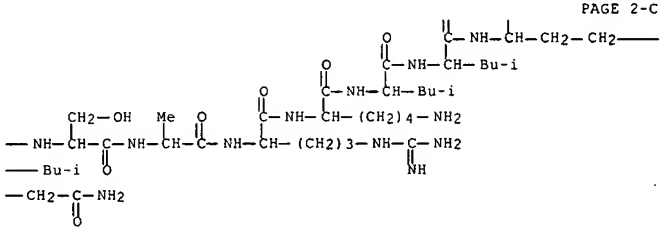

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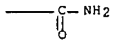

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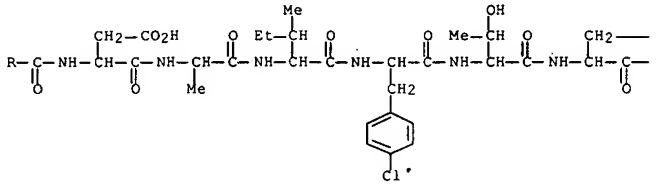

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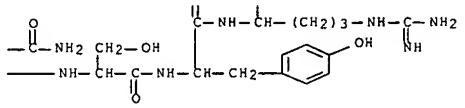

RN 160499-35-4 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), 1-[N-(1-naphthalenylacetyl)-L-histidine]-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 HRDAIFTNSY RKVLXQLSAR KLLQDIXSR

RN 160499-40-1 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-(1-naphthalenylacetyl)-2-D-arginine-6-(4-chloro-L-phenylalanine)-15-(L-2-aminobutanoic acid)-27-L-norleucine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 YRDAIFTNSY RKVLXQLSAR KLLQDIXSR

L23 ANSWER 34 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:293308 CAPLUS Full-text
DOCUMENT NUMBER: 120:293308
TITLE: Amino acid identification and sequence analysis of peptides by reaction mass spectrometry
AUTHOR(S): Yang, Houjun; Hu, Xiaoyu; Chen, Yaozu
CORPORATE SOURCE: State Key Lab. Appl. Org. Chem., Lanzhou Univ., Lanzhou, 730000, Peop. Rep. China
SOURCE: Chinese Journal of Chemistry (1993), 11(6), 540-9
CODEN: CJOCEV; ISSN: 1001-604X

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fast-atom-bombardment mass spectrometry (FAB-MS) is used to distinguish N-terminal series ions from C-terminal series ions of a peptide by on-probe acetylation, and it provides valuable information about the sequence of an unknown peptide. The FAB mass spectra contain a number of characteristic ions in the low-mass region in addition to the sequence ions in the high-mass region. The ions below m/z 200 are characteristic of the amino acid composition of the peptide, from which the amino acid composition of the peptide could be estimated Mixture anal. also is discussed.

IT 121282-52-8
RL: PRP (Properties)
(sequence of, determination of, by fast-atom-bombardment mass spectrometry)

RN 121282-52-8 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-L-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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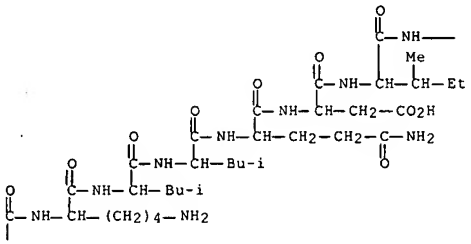

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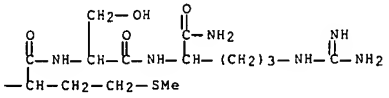

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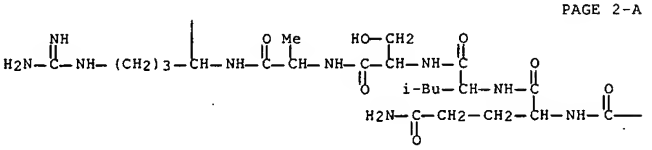

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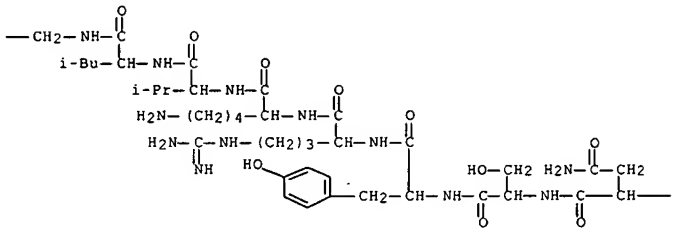

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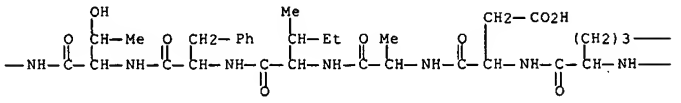

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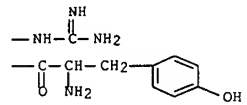

L23 ANSWER 35 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:420652 CAPLUS Full-text
DOCUMENT NUMBER: 119:20652
TITLE: Position 2 and position 2/Ala15-substituted analogs of bovine growth hormone-releasing factor (bGRF) with enhanced metabolic stability and improved in vivo bioactivity
AUTHOR(S): Kubiak, Teresa M.; Friedman, Alan R.; Martin, Roger A.; Ichhpurani, Avneet K.; Alaniz, Glenn R.; Claflin, William H.; Goodwin, Martha C.; Cleary, Diane L.; Kelly, Colleen R.; et al.
CORPORATE SOURCE: Upjohn Co., Kalamazoo, MI, 49001, USA
SOURCE: Journal of Medicinal Chemistry (1993), 36(7), 888-97
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To prepare GRF analogs with high activity in vivo, a strategy was undertaken to stabilize the peptide to dipeptidylpeptidase IV (DPP-IV), a protease found in plasma which inactivates native human and bovine GRF by cleavage of the Ala2-Asp3 bond. Replacement of the Ala2 residue with Ser, Thr, or Gly in [Leu27]bGRF(1-29)NH2 resulted in peptides greatly stabilized against proteolysis in plasma, but having low inherent GH-releasing activity when tested in bovine pituitary cell cultures. Replacement of Gly15 with Ala15 was marginally effective in improving the in vitro bioactivity of this group of peptides. When tested for GH-hormone release in steers, however, the Thr2,Ala15 analog was four times more potent than bGRF(1-44)NH2. Eleven addnl. analogs from the [X2,Ala15,Leu27]bGRF(1- 29)NH2 series were synthesized and evaluated for metabolic stability in bovine plasma and for GH releasing activity in steers in vivo and in rat pituitary cells in vitro. Two compds., [Val2,Ala15,Leu27]bGRF(1-29)NH2 and [Ile2,Ala15,Leu27]bGRF(1-29)NH2, had increased GH-releasing activity in steers over that of [Thr2,Ala15,Leu27]bGRF(1-29)NH2 and over a previously reported super-potent analog, [desNH2Tyr1,D-Ala2,Ala15]hGRF(1- 29)NH2.

IT 148298-15-1
RL: BIOL (Biological study)
(growth hormone-releasing activity and biol. stability of, structure in relation to)

RN 148298-15-1 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-L-arginine-15-L-alanine-27-L-leucine-28-L-asparagine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDILNR

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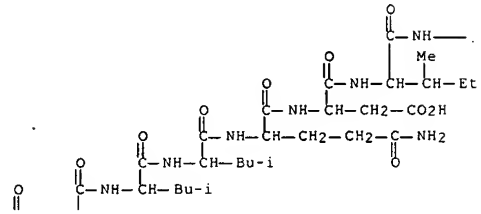

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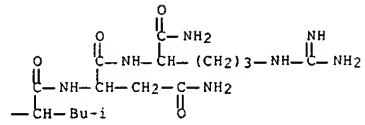

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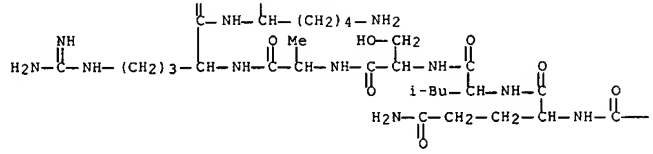

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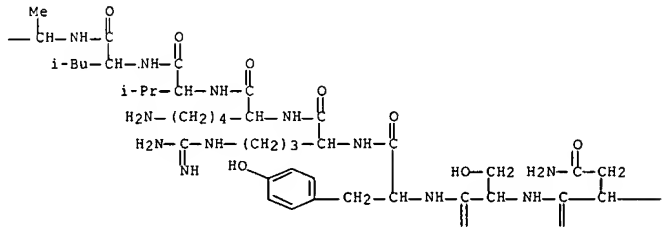

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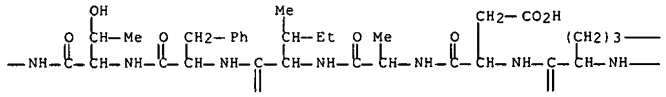

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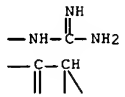
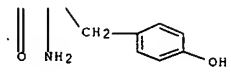


PAGE 3-B

PAGE 3-C

PAGE 3-D



L23 ANSWER 36 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:401079 CAPLUS Full-text
DOCUMENT NUMBER: 119:1079
TITLE: A method for evaluation of activity of antagonistic analogs of growth hormone-releasing hormone in a superfusion system
AUTHOR(S): Rekasi, Zoltan; Schally, Andrew V.
CORPORATE SOURCE: Med. Sch., Tulane Univ., New Orleans, LA, 70146, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1993), 90(6),

2146-9
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To evaluate the endocrine effect of GH-releasing hormone (GHRH) antagonists, a sensitive dynamic in vitro system was developed. The concentration causing 50% inhibition (IC50) of the standard GHRH antagonist human [N-Ac-Tyr1, D-Arg2]GHRH-(1-29)-NH2 is 4.5 + 10-8M in the dispersed pituitary cell superfusion system. This value is 11-fold less than that measured in earlier static pituitary cell cultures. This reliable dynamic system is simple, fast, and inexpensive and not only makes it possible to obtain quant. data on the inhibitory capacity of the antagonists but also provides information about the intrinsic GHRH activity of the analog. The dynamic interactins of the GHRH antagonist, the GHRH receptors, and GH release can also be evaluated by this superfusion system. The pulsatile GH release induced by 10-9M human GHRH-(1-29)-NH2 was inhibited by 2 modes of application, preincubation and simultaneous administration of the GHRH antagonist (10-9-10-6M). The reduction in GHRH-stimulated GH response was more pronounced when the cells were preincubated with the antagonist prior to GHRH infusion than for simultaneous application. The inhibitory effect of the antagonist was dose-dependent, temporary, and of the competitive type. GH release induced by nonspecific stimulus (100 mM KCl) was not influenced by the GHRH antagonist. This sensitive dynamic in vitro system appears to be a suitable method for screening the biol. activity of various GHRH antagonists and eliminates the drawbacks of static pituitary cell culture.

IT 93942-91-7
RL: ANST (Analytical study)
(somatoliberin antagonistic activity of, method for evaluation of, in superfusion system of anterior pituitary cells)

RN 93942-91-7 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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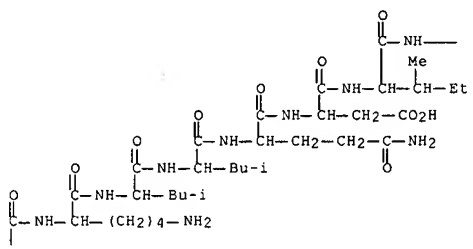

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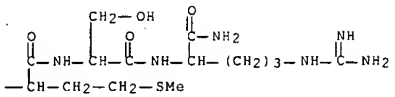

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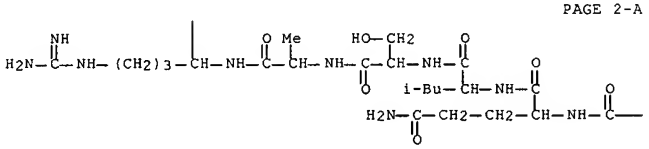

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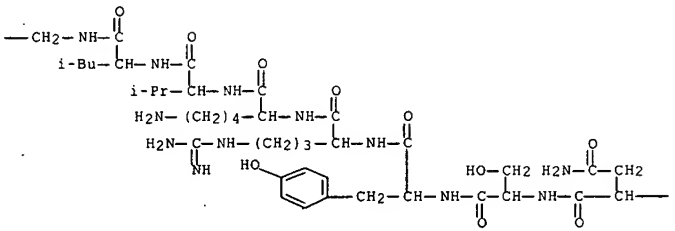

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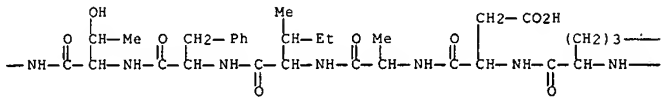

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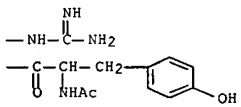

L23 ANSWER 37 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:76528 CAPLUS Full-text
DOCUMENT NUMBER: 116:76528
TITLE: Human growth hormone-releasing hormone analogs with much improved in vitro growth hormone-releasing potencies in rat pituitary cells
AUTHOR(S): Coy, David H.; Hocart, Simon J.; Murphy, William A.
CORPORATE SOURCE: Med. Cent., Tulane Univ., New Orleans, LA, 70112, USA
SOURCE: European Journal of Pharmacology (1991), 204(2), 179-85
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Enhancement of the amphiphilic α-helical properties of the central and C-terminal regions of growth hormone-releasing hormone (GRH) by substitution with helix-favoring amino acids, particularly Ala, can result in improvements in GH-releasing potencies using monolayer cultures of rat pituitary cells, a

system which reflects analog receptor affinity rather than effects of structural modifications on pharmacokinetic properties. For instance, helix-enhanced [Ala15]GRH-(1-29)NH2 was 5-fold more potent than [Gly15]GRH-(1-29)NH2 in this assay. The extent and importance of α-helical character further towards the N-terminus is less clear since Chou-Fasman probability calcns. indicate also the possibility of β-bend formation in the 6-10 region. However, replacement of Asn8 with Ala resulted in a 4-fold improvement in potency; when this was combined with Ala15 to give [Ala8,15]GRH-(1-29)NH2 a 15-fold increase in potency was achieved; combination of D-Ala2, Ala8, and Ala15 gave a 27-fold increase, indicating that the effects of all of these modifications were additive. Computer anal. furthermore revealed that substitution of Ala for Ser in position 9 should also increase α-helix probability from 0.93 to 1.05. [D-Ala2,Ala8,9,15]GRH-(1- 29]NH2 was 49-fold more potent than GRH itself, making it by far the most potent analog thus far reported in an in vitro assay system. The Ala8 and Ala9 substitutions were also effective in improving the inhibitory potency of a GRH receptor antagonist, [D-Ala2,Leu27]GRH-(1-29)NH2. [D-Arg2,Ala8,15]GRH-(1-29)NH, and [D-Arg2,Ala8,9,15]GRH-(1-29)NH2 displayed IC50 values of 5.9 + 10-8 and 1.7 + 10-8M, resp., against GRH-stimulated GH release compared with an IC50 of 2.2 + 10-7M for the unmodified control analog, and are thus commensurate with corresponding agonist analog potency improvements.

IT 138659-23-1 138659-25-3 138659-26-4
RL: BIOL (Biological study)
(growth hormone release inhibition by, structure in relation to)

RN 138659-23-1 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-D-arginine-27-L-leucine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

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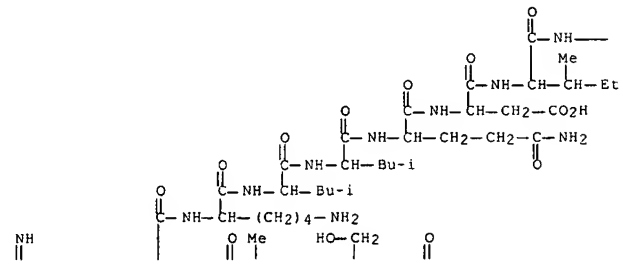

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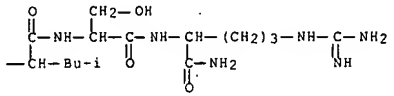

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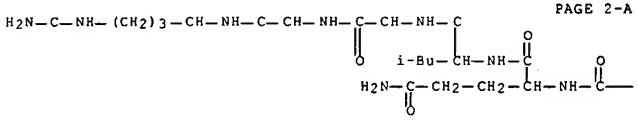

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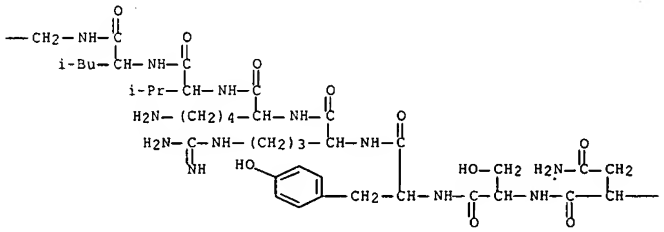

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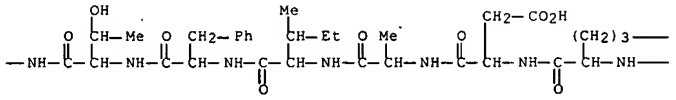

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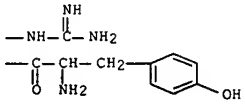

RN 138659-25-3 CAPLUS

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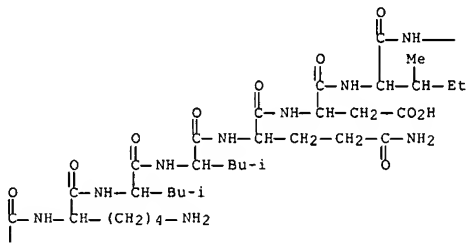

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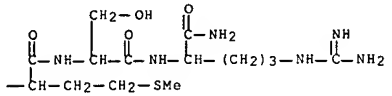

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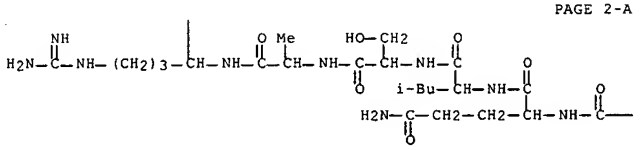

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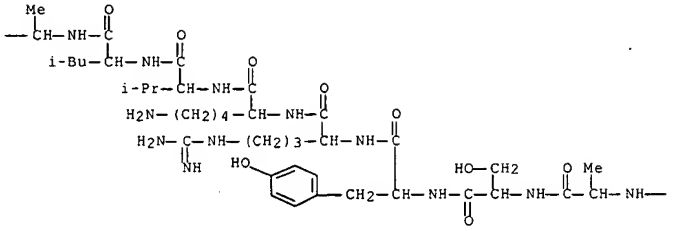

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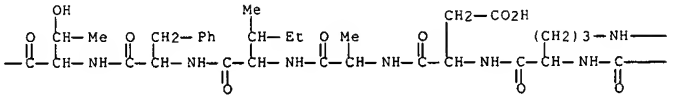

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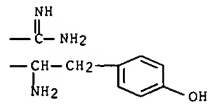

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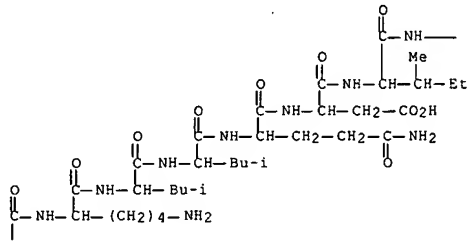

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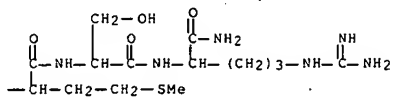

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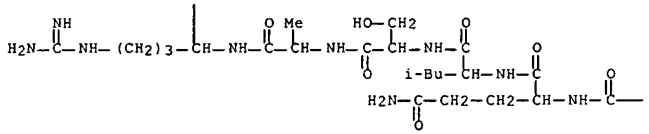

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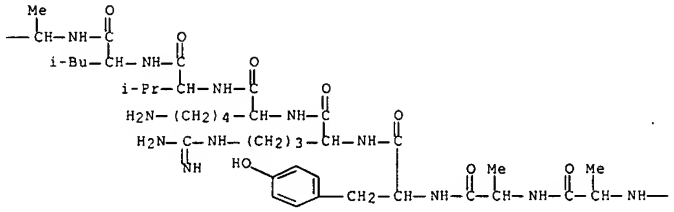

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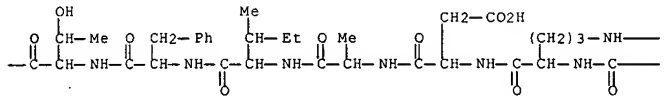

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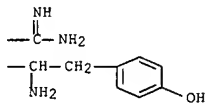

L23 ANSWER 38 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:229806 CAPLUS Full-text
DOCUMENT NUMBER: 112:229806
TITLE: Synthetic analogs of growth hormone-releasing factor with antagonistic activity in vitro
AUTHOR(S): Sato, Kazuki; Hotta, Mari; Kageyama, Jingo; Hu, Hsiaoyu; Dong, Minghui; Ling, Nicholas
CORPORATE SOURCE: Dep. Mol. Endocrinol., Whittier Inst. Diabetes Endocrinol., La Jolla, CA, 92037, USA
SOURCE: Biochemical and Biophysical Research Communications (1990), 167(1), 360-6
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Analogs of human and rat growth hormone-releasing factor (hGRF and rGRF), related to [D-Arg2]hGRF(1-29)NH2, were synthesized by solid phase methodol. Their capacity to inhibit growth hormone secretion stimulated by hGRF(1-44)NH2

was tested on rat anterior pituitary cells in monolayer culture. Among the analogs of hGRF, [D-Arg2,29,Arg30]hGRF(1-30)NH2 showed the highest antagonistic potency of 3.64 relative to [D-Arg2]hGRF(1-29)NH2 = 1. However, the most potent analog synthesized thus far was [N-Ac-His1,D-Arg2,Ala15]rGRF(1-29)NH2, which showed a relative potency of 27.7.

IT 93942-91-7 93942-95-1 121282-52-8
121282-56-2 121282-57-3 121396-16-5
121396-17-6 121448-26-8 126883-97-4
126883-98-5 127119-77-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(growth hormone-releasing factor agonist and antagonist activity of)

RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

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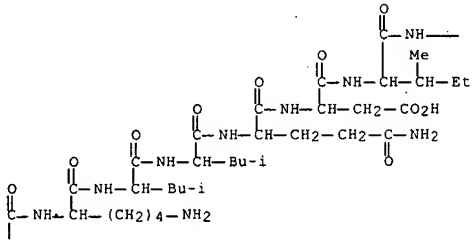

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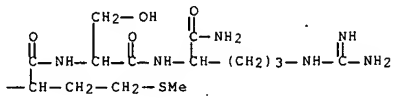

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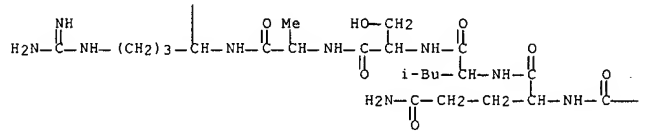

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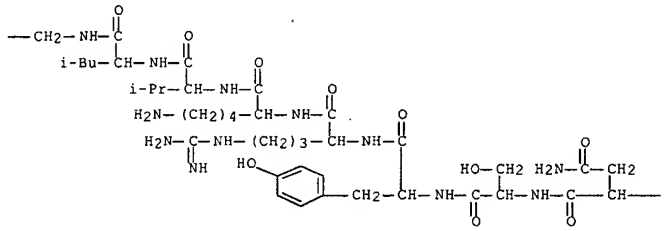

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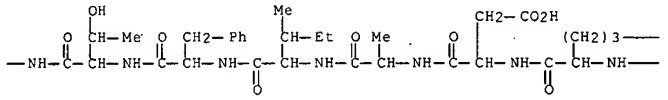

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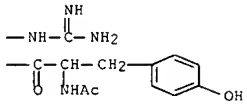

RN 93942-95-1 CAPLUS

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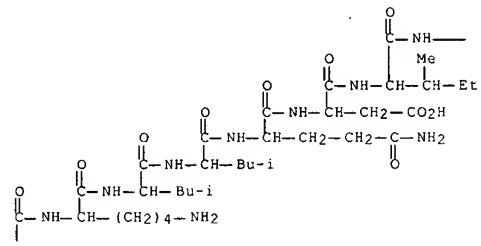

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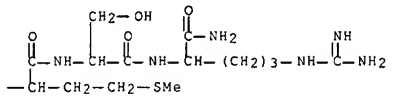

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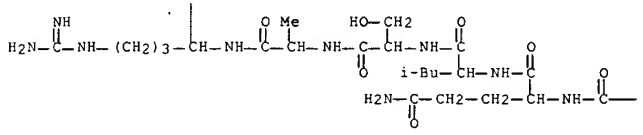

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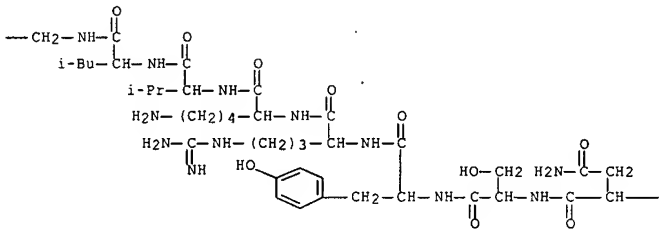

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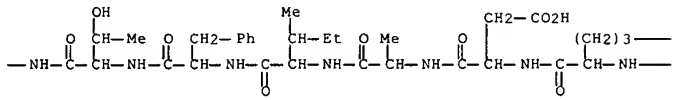

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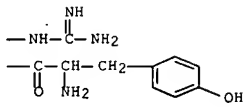

RN 121282-52-8 CAPLUS

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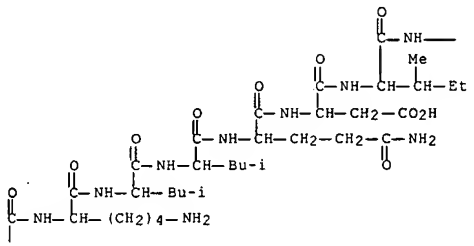

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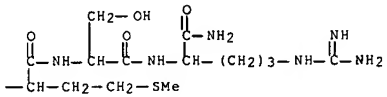

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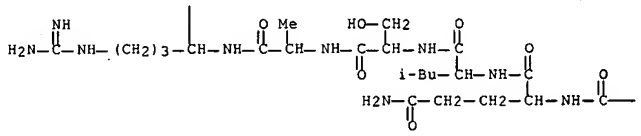

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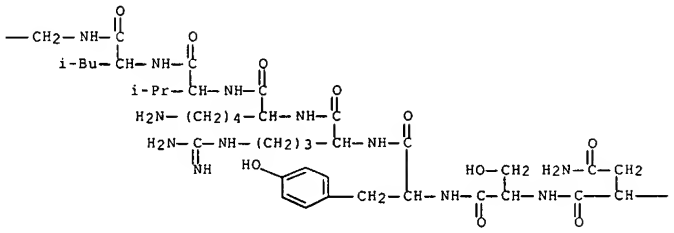

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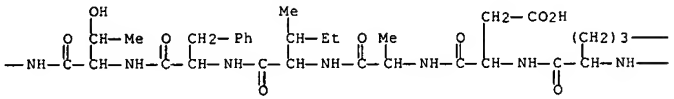

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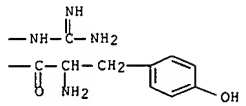

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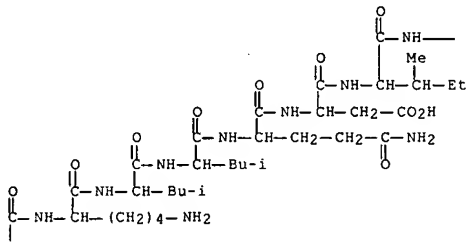

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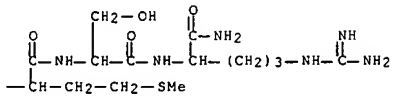

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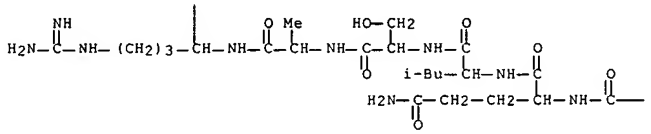

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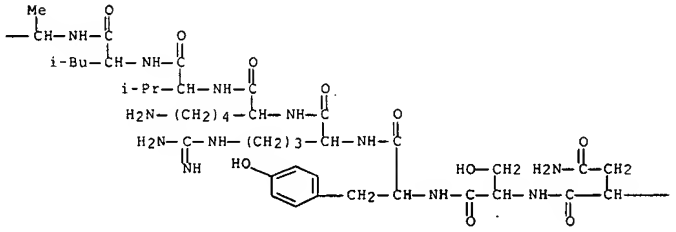

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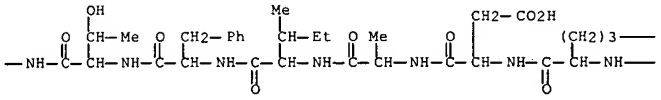

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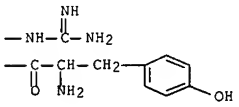

RN 121282-57-3 CAPLUS

CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-8-D-asparagine-15-L-alanine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIMSR

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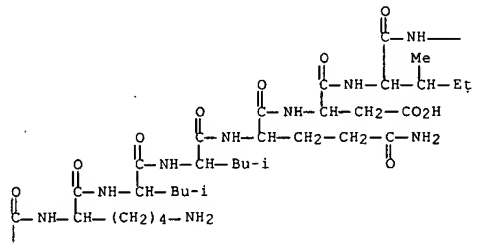

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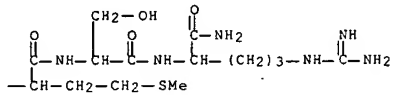

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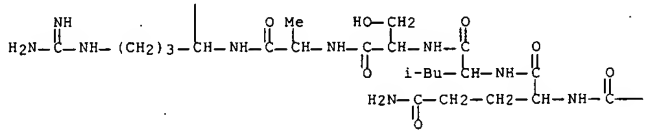

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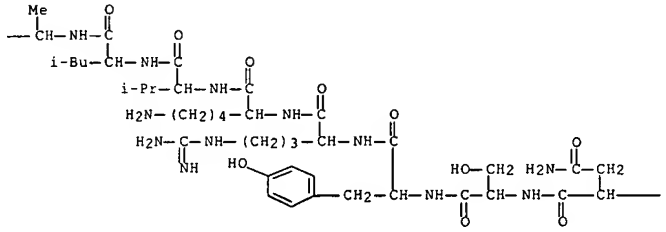

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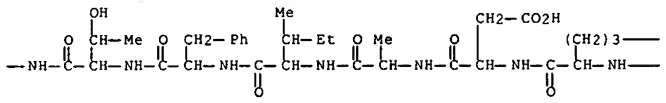

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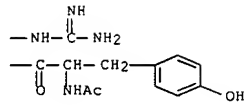

RN 121396-16-5 CAPLUS
CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-D-arginine-30-L-argininamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRR

RN 121396-17-6 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-D-arginine-30-L-tyrosinamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRY

RN 121448-26-8 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRQ QGESNQERGA RARL

RN 126883-97-4 CAPLUS
CN L-Argininamide, L-tyrosyl-D-arginyl-D-α-aspartyl-L-alanyl-L-isoleucyl-L-phenylalanyl-L-threonyl-D-asparaginyl-L-seryl-D-tyrosyl-D-arginyl-L-lysyl-L-valyl-L-leucyl-L-alanyl-L-glutaminyl-L-leucyl-L-seryl-L-

alanyl-L-arginyl-L-lysyl-L-leucyl-L-leucyl-L-glutaminyl-L-α-aspartyl-L-isoleucyl-L-methionyl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIMSR

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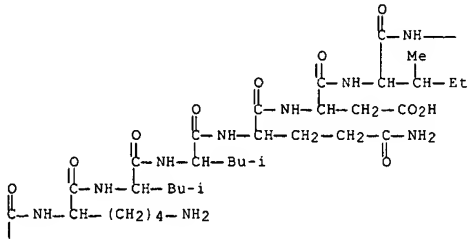

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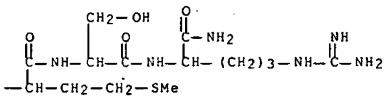

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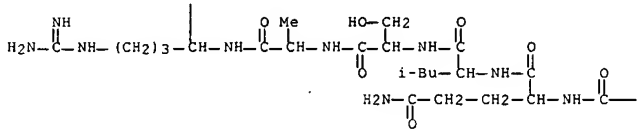

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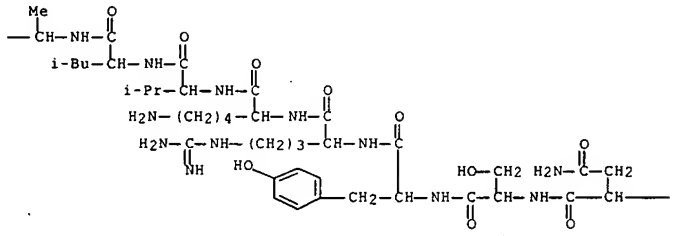

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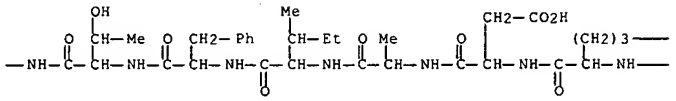

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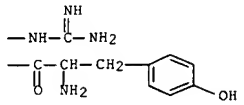

RN 126883-98-5 CAPLUS
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SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRR

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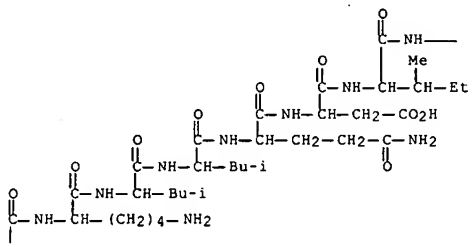

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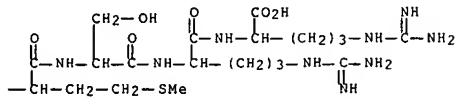

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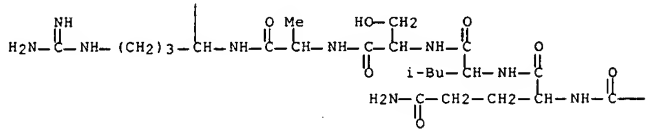

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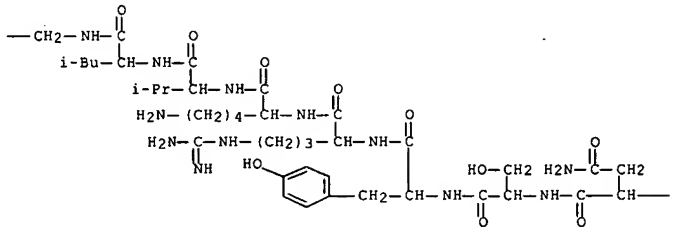

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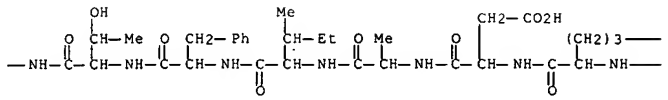

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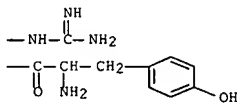

RN 127119-77-1 CAPLUS
CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-D-arginine-30-L-tyrosine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRY

L23 ANSWER 39 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:471103 CAPLUS Full-text
DOCUMENT NUMBER: 111:71103
TITLE: Growth hormone-releasing factor analogs with potent antagonist activity

AUTHOR(S): Ling, Nicholas; Sato, Kazuki; Hotta, Mari; Chiang, Teh Chang; Hu, Hsiau Yu; Dong, Ming Hui
CORPORATE SOURCE: Lab. Neuroendocrinol., Salk Institute, La Jolla, CA, 92037, USA
SOURCE: Pept.: Chem. Biol., Proc. Am. Pept. Symp. 10th (1988), Meeting Date 1987, 484-6. Editor(s): Marshall, Garland R. ESCOM Sci. Pub.: Leiden, Neth. CODEN: 56MDA6
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A series of human somatoliberin (1-29) amide [hGRF(1-29)NH2] analogs were prepared and examined for antagonist activity along with their capacity to release growth hormone (GH) from rat anterior pituitary cells in vitro. Substitution of a D-arginine group in the 2nd position resulted in antagonist activity whereas compds. with an L-arginine in the 2nd position were inactive and those with D-arginine in the 4th position were only weakly active. N-terminal acetylation decreased GRF receptor binding affinity but suppression of GH secretion was improved. Increasing the basicity at the N-terminal region gave a weaker agonists. The analogs [D-Arg2,29Tyr30]- and [D-Arg2,29,Arg30]-hGRF(1-30)NH2 showed improved affinity and maximum suppression. The rat GRF (rGRF) analog [D-Arg2,Ala15]rGRF(1-29)NH2 was more potent an antagonist than [D-Arg2]hGRF(1-29)NH2. Evidently, modification of the N-terminal residue is required to suppress agonist activity, whereas modification at position 15 is needed to increase affinity for the receptor.
IT 93942-91-7 93942-95-1 121282-52-8
121282-58-4 121396-17-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(growth hormone-releasing factor agonist and antagonist activity of)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

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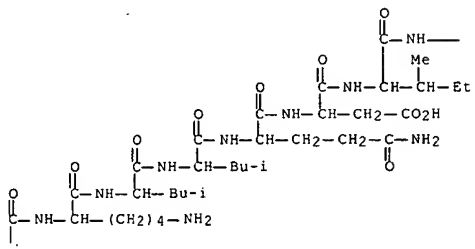

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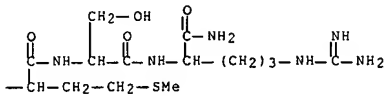

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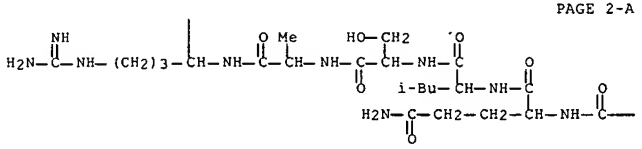

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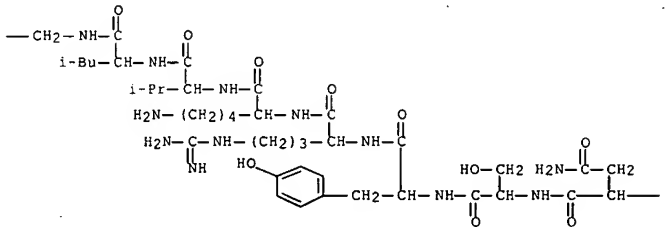

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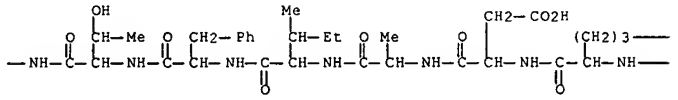

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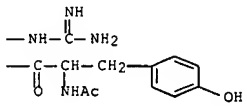

RN 93942-95-1 CAPLUS

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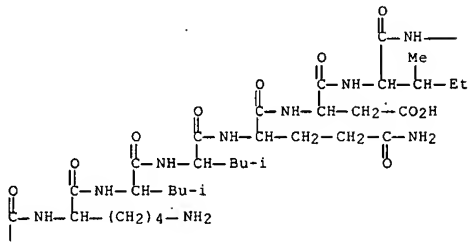
NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

PAGE 1-A



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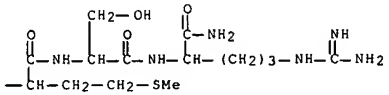

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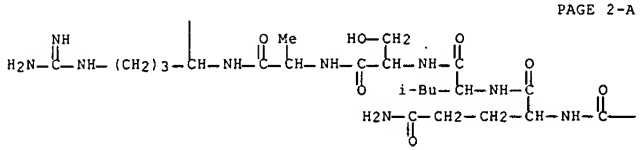

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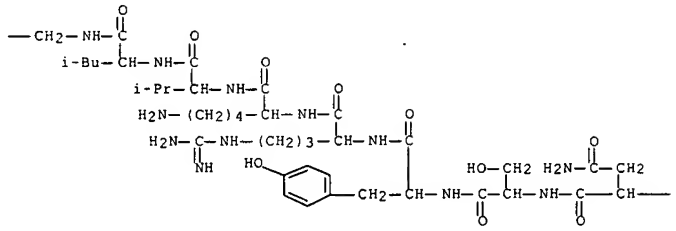

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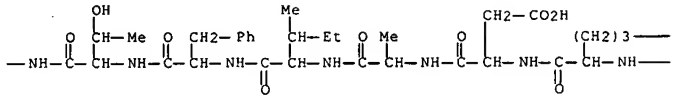

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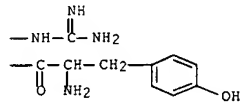

RN 121282-52-8 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-L-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

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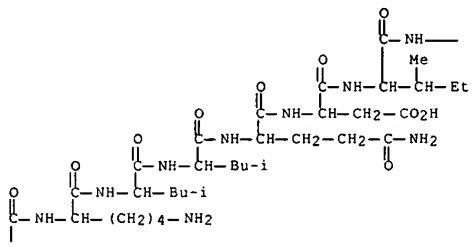
SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

PAGE 1-A



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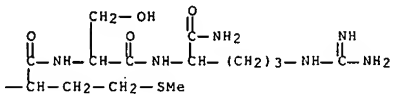

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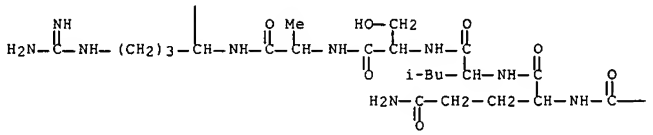

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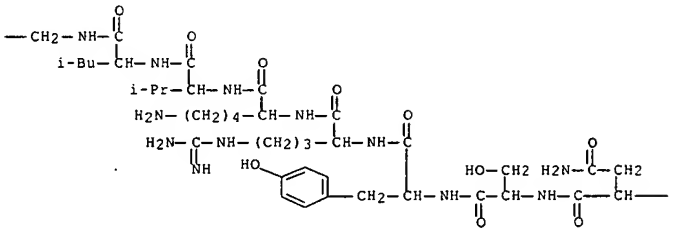

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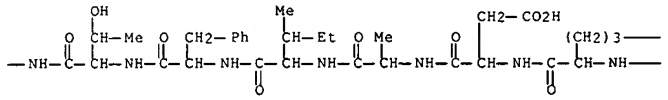

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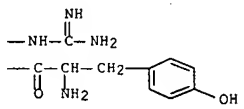

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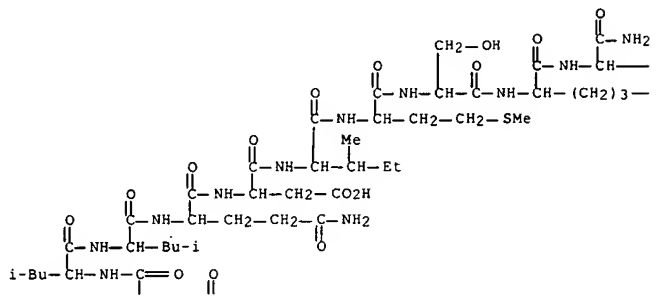
NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRR

PAGE 1-A



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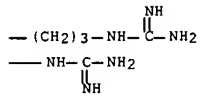

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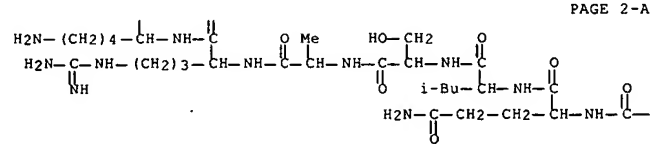

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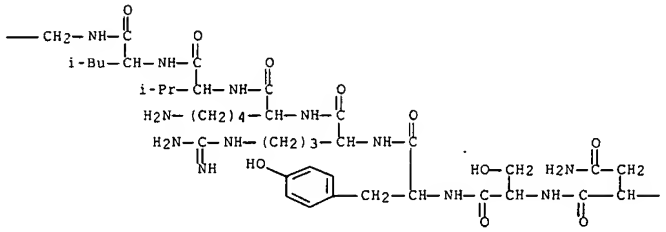

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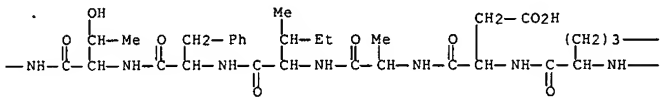

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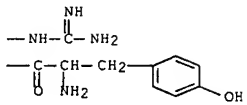

RN 121396-17-6 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-D-arginine-30-L-tyrosinamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRY

L23 ANSWER 40 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:433758 CAPLUS Full-text
DOCUMENT NUMBER: 111:33758
TITLE: Structure-activity relations of growth hormone-releasing factor (GRF)
AUTHOR(S): Sato, Kazuki; Hotta, Mari; Kageyama, Jingo; Chiang, Teh Chang; Hu, Hsiao Yu; Dong, Ming Hui; Ling, Nicholas
CORPORATE SOURCE: Salk Inst., La Jolla, CA, 92037, USA
SOURCE: Peptide Chemistry (1989), Volume Date 1988, 26th, 85-90
CODEN: PECHDP; ISSN: 0388-3698
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cyclic analogs of human growth hormone-releasing factor (hGRF) (1-29)NH2, known to retain most of the biol activity of the native mol., were synthesized and intrinsic activities and antagonist potencies compared by using a rat anterior pituitary cell culture. The hGRF(1-29)NH2 analogs contained cyclic modifications as follows: Cys2 linked to Cys15, Cys3 to Cys14, Cys4 to Cys13, Cys5 to Cys15, Cys2 to Cys13 and Cys5 to Cys14. All the analogs were weak agonists. Analogs (28) were prepared with a corresponding D-amino acid at each position of hGRF(1-29)NH2, except for glycine at position 15. Analogs with D-Ile5, D-Phe6, D-Thr7, and D-Val13 were much less potent than hGRF(1-29)NH2, suggesting that the specific conformation of these positions is important for the binding of the analogs to the hGRF receptor. Since [D-Arg7]hGRF(1-29)NH2 had low intrinsic activity and some antagonistic activity,

a series of similarly modified analogs of rat GRF were prepared The N-terminally acetylated analog ([N-Ac-Tyr1,D-Arg2]hGRF(1-29)NH2 was a more effective antagonist them [D-Arg2]hGRF(1-29)NH2, because it showed lower intrinsic activity than the [D-Arg2]peptide. The [D-Arg2,D-Asn8,Ala15] analog had higher antagonistic potency than [D-Arg2]hGRF(1-29)NH2; however, it also had higher intrinsic activity. [D-Arg2,29,Arg30]hGRF(1-30)NH2 was the most potent antagonist in the hGRF series. In the rat series [N-Ac-His1,D-Arg2,Ala15]hGRF(1-29)NH2 was the most potent antagonist. These compds. were prepared studied on part of a search for specific antagonists of hGRF for clin. and research uses.

IT 93942-91-7 93942-95-1 121282-52-8
121282-56-2 121282-57-3 121282-58-4
121396-16-5 121396-17-6 121396-19-8
121448-26-8
RL: PRP (Properties)
(structure-somatoliberin activity relation of)

RN 93942-91-7 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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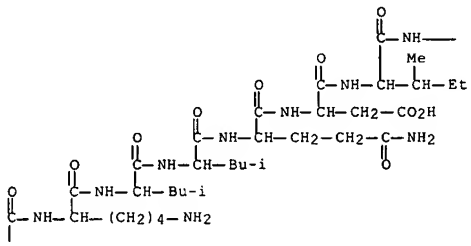

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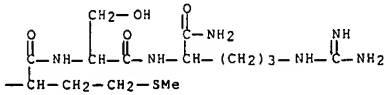

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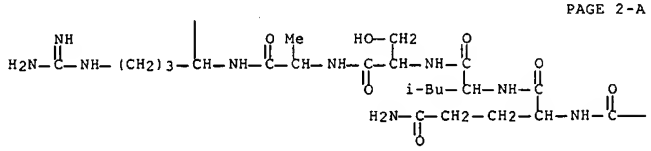

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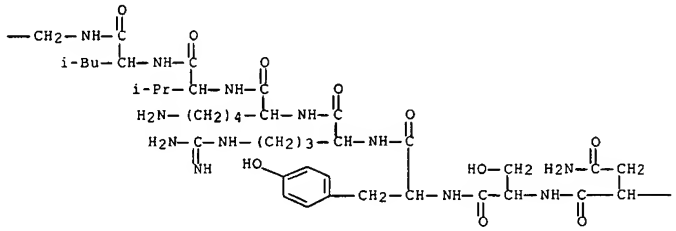

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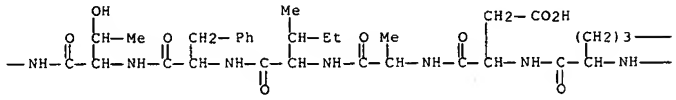

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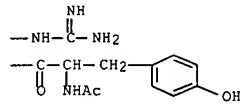

RN 93942-95-1 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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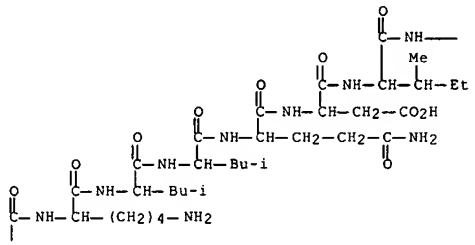

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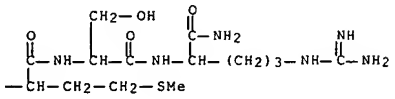

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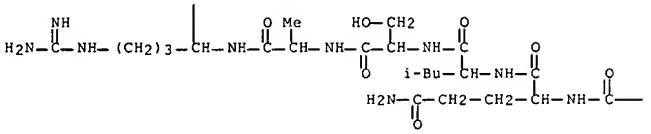

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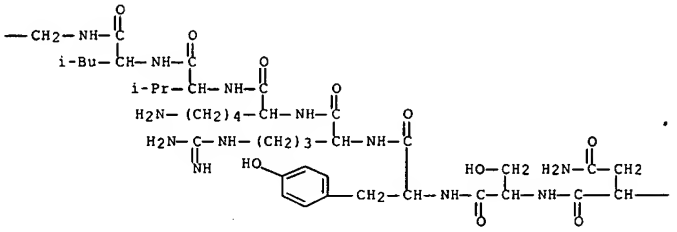

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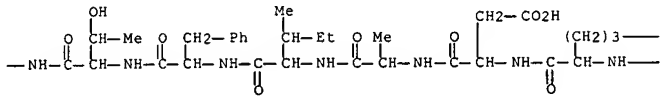

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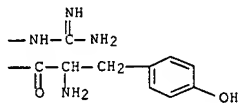

RN 121282-52-8 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-L-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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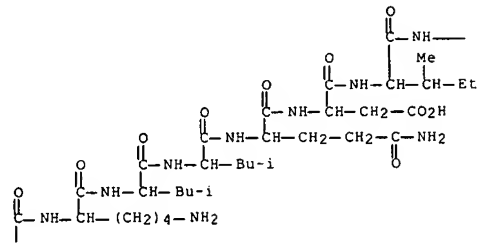

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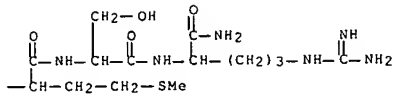

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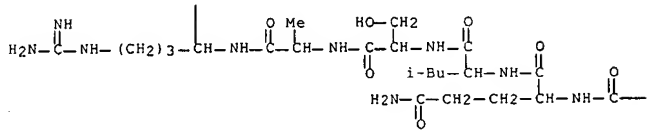

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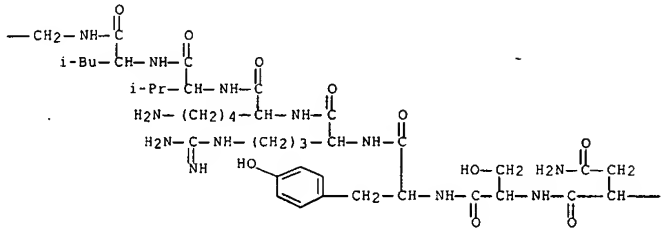

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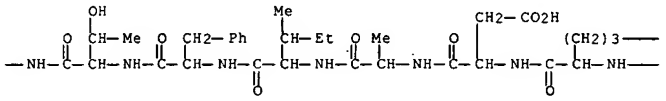

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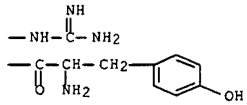

RN 121282-56-2 CAPLUS
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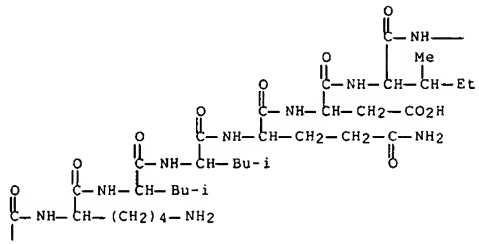

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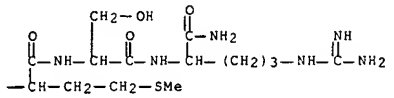

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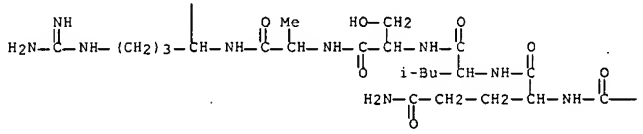

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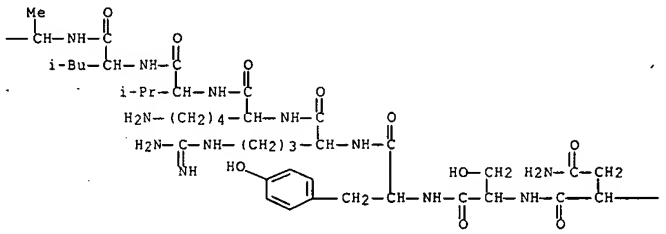

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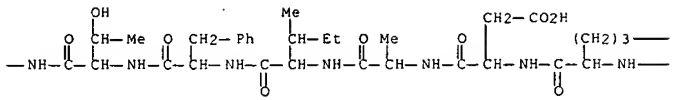

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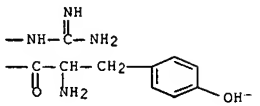

RN 121282-57-3 CAPLUS

CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-8-D-asparagine-15-L-alanine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLAQLSAR KLLQDIMSR'

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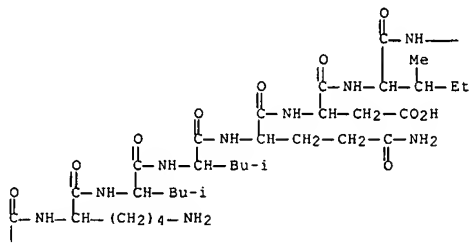

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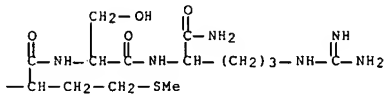

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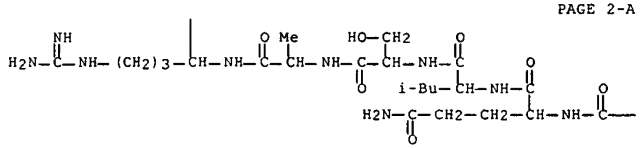

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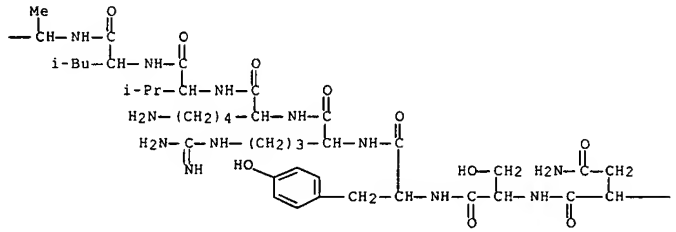

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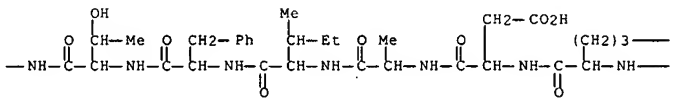

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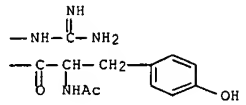

RN 121282-58-4 CAPLUS
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SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRR

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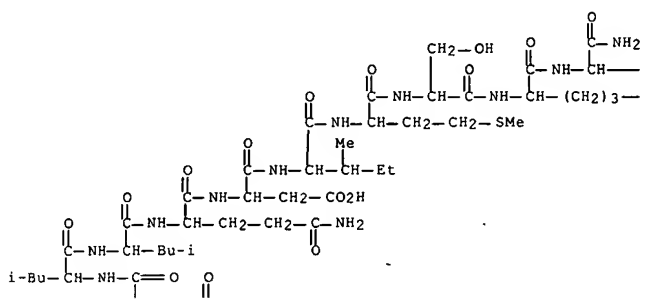

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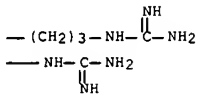

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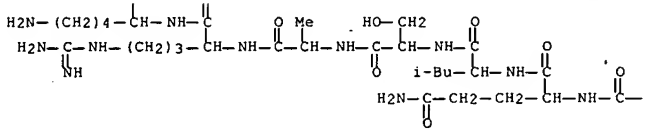

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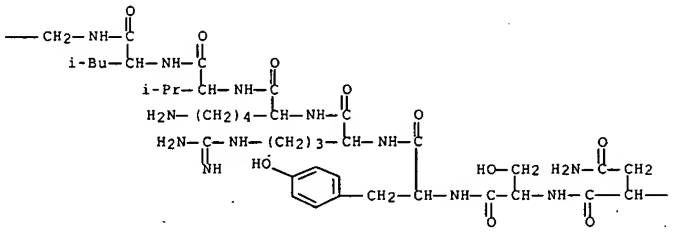

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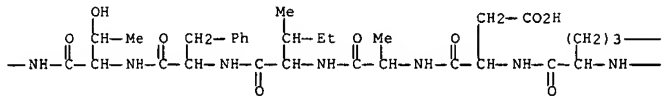

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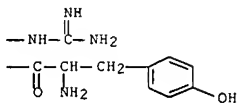

RN 121396-16-5 CAPLUS
CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-D-arginine-30-L-argininamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRR

RN 121396-17-6 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-D-arginine-30-L-tyrosinamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-

L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRY

RN 121396-19-8 CAPLUS
CN Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-D-arginine-30-L-tyrosinamide-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRY

RN 121448-26-8 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSRQ QGESNQERGA RARL

L23 ANSWER 41 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:166384 CAPLUS Full-text
DOCUMENT NUMBER: 110:166384
TITLE: Blockade of growth hormone-releasing factor (GRF) activity in the pituitary and hypothalamus of the conscious rat with a peptidic GRF antagonist
AUTHOR(S): Lumpkin, Michael D.; McDonald, John K.
CORPORATE SOURCE: Sch. Med., Georgetown Univ., Washington, DC, 20007, USA
SOURCE: Endocrinology (1989), 124(3), 1522-31
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Microinjection of synthetic growth hormone-releasing factor (GRF) into the cerebroventricles or hypothalamus of the rat produces a number of neural effects, including the suppression of growth hormone (GH) secretion, possibly representing a neg. ultrashort loop autoregulation of GRF and/or stimulation of somatostatin neurosecretion. To demonstrate that such neuromodulation acts physiol. through endogenous GRF activity, the peptidic GRF antagonist (N-Ac-Tyr1, D-Arg2)GRF-(1-29)-NH2 was used to block the action of GRF on its presumed receptors in the hypothalamus. First, to establish the efficacy of the antagonist to block GRF receptors in the anterior pituitary, the antagonist was injected i.v. at doses of 2,20, and 50 μg into conscious male rats fitted with jugular cannulae. Sequential blood sampling every 15 min for 6 h between 1000-1600 h showed that 50 μg antagonist, i.v., suppressed the 2 periods of spontaneous release of RIAable GH in controls in the morning and afternoon. A dose of 20 μg, i.v., lowered mean plasma GH between 1400-1500 h,

whereas the 2-μg dose was without effect. The GRF antagonist was then microinjected into the third ventricle (3V) of conscious male rats at doses of 0.5 and 8.0 ng in 2 μL sterile saline. The 8.0-ng dose of 3V antagonist elicited a 3-fold increase in the morning peak of GH (nanograms per mL): 3V antagonist, 159.0; 3V control, 51.0. The 0.5-ng dose was without effect. Finally, pretreatment with the GRF antagonist 3V (10 ng), followed 15 min later by 10 ng rat GRF administered 3V, completely blocked the GRF-induced suppression of pulsatile GH release observed earlier. Both the systemic and central effects of the antagonist were specific to the control of GH, since prolactin concns. were unaltered. These results (1) demonstrated the ability of a peptidic GRF antagonist to specifically suppress pulsatile GH release after its systemic administration, presumably by acting on pituitary GRF receptors, and (2) support the notion that GRF receptors are also present in the hypothalamus and are available for the physiol. mediation of GRF-induced inhibition of GH release by a central mechanism.

IT 93942-91-7
RL: BIOL (Biological study)
(growth hormone-releasing factor receptors of hypothalamus and pituitary gland binding of, growth hormone secretion in relation to)

RN 93942-91-7 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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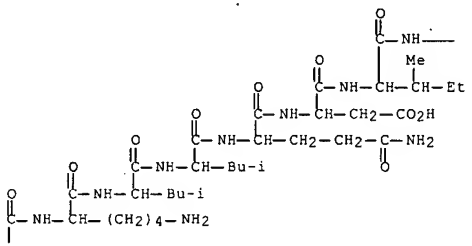

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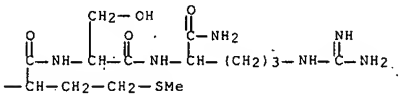

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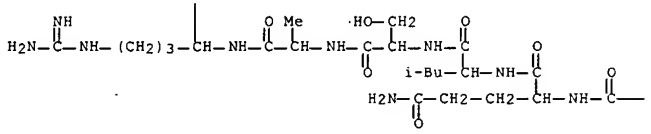

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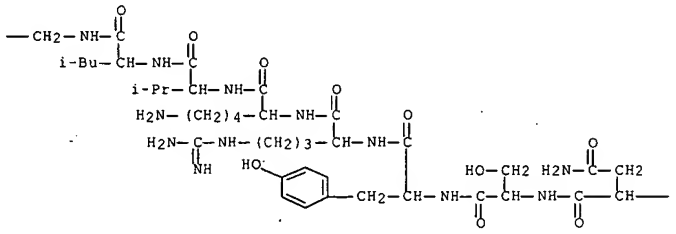

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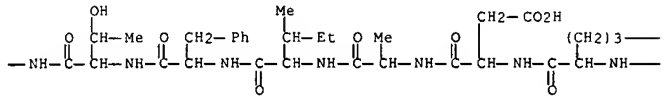

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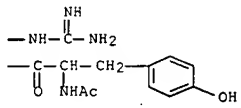

L23 ANSWER 42 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:148244 CAPLUS Full-text
DOCUMENT NUMBER: 110:148244
TITLE: Inhibition of pulsatile growth hormone (GH) secretion and somatic growth in immature rats with a synthetic GH-releasing factor antagonist
AUTHOR(S): Lumpkin, Michael D.; Mulroney, Susan E.; Haramati, Aviad
CORPORATE SOURCE: Sch. Med., Georgetown Univ., Washington, DC, 20007, USA
SOURCE: Endocrinology (1989), 124(3), 1154-9
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Indwelling Silastic catheters were placed into the jugular veins of immature male rats (120-140 g) at 29 days of age. After a recovery period of 48 h, beginning at 1000 h, 100-400 μg (N-Ac-Tyr1,D-Arg2)growth hormone-releasing

factor-(1-29)-NH2 (GRF antagonist)/kg or its vehicle (controls) were injected i.v. immediately after withdrawing an initial blood sample from conscious undisturbed animals. Subsequent samples were obtained every 20 min until 1520 h. Red blood cells were resuspended in a restorative volume of saline and reinjected after each blood sample. Both doses of antagonist prevented the 2 major periods of episodic growth hormone (GH) release observed in controls. For example, mean plasma GH (nanograms per mL) at 1120 h was 9.0 in antagonist-treated rats and 37.1 in controls. Mean plasma GH at 1340 h was 10.8 in antagonist-treated rats and 38.8 in controls. Injection of 400 μg/kg of the structurally related VIP antagonist (N-Ac-Tyr1,D-Phe2)GRF-(1-29)-NH2, i.v. failed to suppress spontaneous GH release. GRF antagonist (100 μg/kg) was next administered twice daily i.v. for 4 days to 31-day-old rats in metabolic cages. This treatment essentially arrested the normal rapid body weight gain, significantly suppressed increases in body and tail lengths, and reduced increases in heart and kidney wts. Food intake and fecal output were unchanged by antagonist treatment and, therefore, did not contribute to the observed effects. Apparently, a number of tissues and organs are stimulated by the pulsatile secretion of GH and a peptidic GRF receptor antagonist is useful in blocking episodic GH release in immature animals. As a consequence, this specific antagonist is effective in suppressing numerous aspects of somatic growth.

IT 93942-91-7
RL: BIOL (Biological study)
(growth and somatotropin secretion inhibition by)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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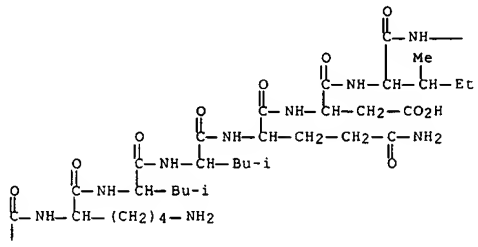

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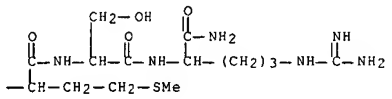

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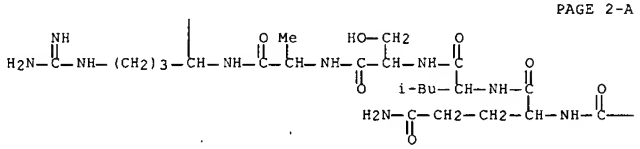

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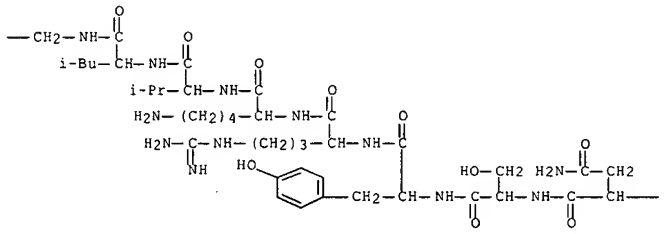

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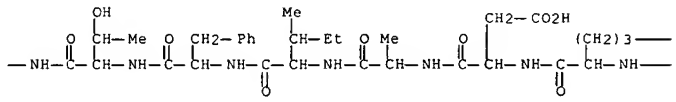

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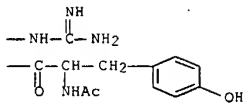

L23 ANSWER 43 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	1988:448562 CAPLUS Full-text
DOCUMENT NUMBER:	109:48562
TITLE:	Synthesis and in vitro bioactivity of human growth hormone-releasing factor analogs substituted with a single D-amino acid
AUTHOR(S):	Sato, Kazuki; Hotta, Mari; Kageyama, Jingo; Chiang, Teh Chang; Hu, Hsiao Yu; Dong, Ming Hui; Ling, Nicholas
CORPORATE SOURCE:	Lab. Neuroendocrinol., Salk Inst., La Jolla, CA, 92037, USA
SOURCE:	Biochemical and Biophysical Research Communications (1987), 149(2), 531-7 CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Fifty-four analogs of human growth hormone-releasing factor (hGRF) substituted with a single D-amino acid were synthesized by solid phase methodol. Their capacity to release growth hormone was tested on rat anterior pituitary cells in monolayer culture. Among the series of 28 analogs which had the amino acid at each position of hGRF (1-29)NH2, except glycine at position 15, substituted by the corresponding D-isomer, [D-Ala2]-, [D-Asp3]-, [D-Asn8]-, [D-Tyr10]-, [D-Asp25]-, [D-Met27]-, [D-Ser28]-, and [D-Arg29]hGRF(1-29)NH2 were as potent as hGRF(1-29)NH2, while [D-Ile5]-, [D-Phe6]-, [D-Thr7]-, and [D-Val13]hGRF(1-29)NH2 showed quite low potencies. Effects of substitution with other D-amino acids in positions 2, 3, 8, 9, 10 and 11 were also studied. In most cases, the resulting analogs showed decreased potency, but still retained high intrinsic activity. Only [D-Arg2]hGRF(1-29)NH2 showed very low intrinsic activity and some antagonistic property.

IT 93942-91-7P 93942-95-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and growth hormone release by, structure in relation to)

RN 93942-91-7 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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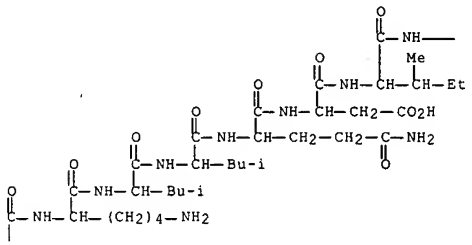

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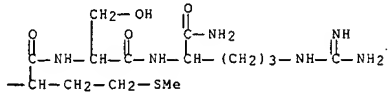

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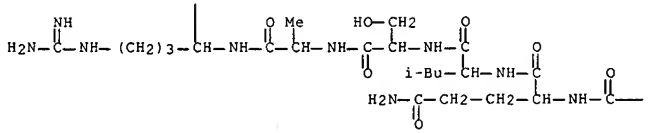

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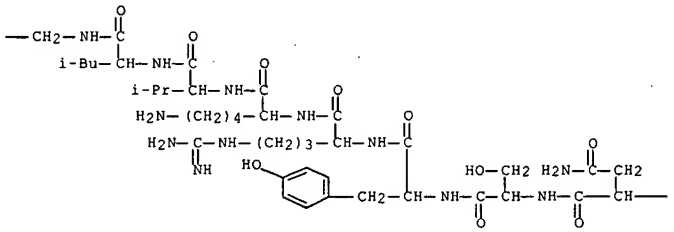

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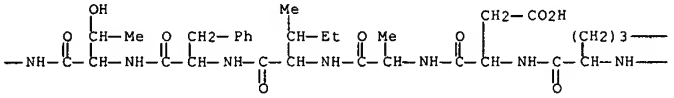

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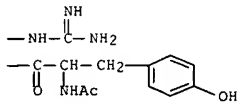

RN 93942-95-1 CAPLUS

CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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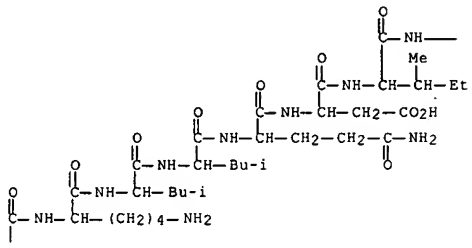

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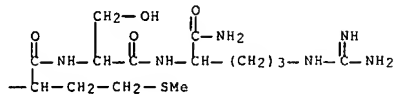

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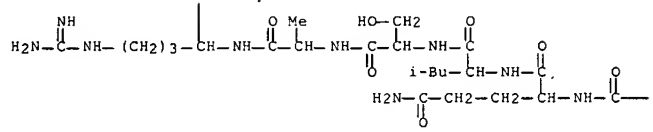

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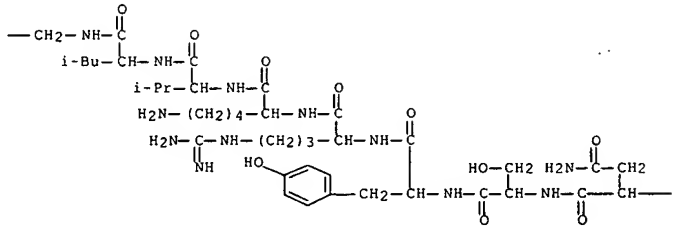

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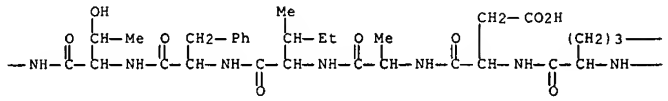

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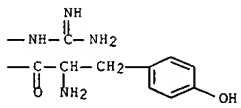

L23 ANSWER 44 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:576483 CAPLUS Full-text
DOCUMENT NUMBER: 107:176483
TITLE: (N,N'-dialkylguanidino)amino acyl GRF analogs
INVENTOR(S): Nestor, John J.
PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA
SOURCE: U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 605,346, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4659693	A	19870421	US 1985-707007	19850228 <--

PRIORITY APPLN. INFO.: US 1984-605346 A2 19840430 <--
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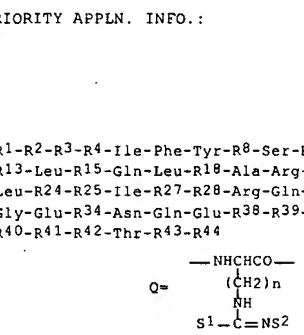

AB The title compds. [I; R1 = H, D- or L-H-Tyr, N-methyltyrosyl, His, R2, excluding D- or L-Ala and D- or L-Leu; R2 = D- or L-Ala, D- or L-Leu, Q, where n = 1-5; S1 = alkyl, etc.; S2 = H; S1C(:NS2) = 5H-imidazol-2-yl, etc,; R3 = Asp, Asn, Glu; R4 = Ala, Gly; R8 = Asn, Ser; R11 = D-Tyr, Phe; R12 = Lys, Arg; R13 = Ile, Val; R15 = Gly, D-Ala; R18 = Ser, Tyr; R24 = Gln, His; R25 = Glu, Asp; R27 = D- or L-Nle, D-or L-Ile, D- or L-Leu, D- or L-Met, D- or L-Val; R28 = Asn, Ser, D-Ala; R34 = Arg, Ser, Ala; R38 = Gln, Arg, Ser; R39 = Arg, Gly; R40 = Ala, Ser, Arg, bond; R41 = Arg, Phe, Lys, bond; R42 = Val, Phe, Ala, Gln, Gly, Ile, Leu, Lys, Pro, bond; R43 = Asn, Arg, bond; R44 = Leu, bond], were prepared [D-HArg(Et2)2]1-29(NH2)- hGRF was prepared via solid-phase synthesis using a benzhydrylaminopolystyrene-1% divinylbenzene resin.
IT 110781-88-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as growth hormone releasing factor analog)
RN 110781-88-9 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine-27-L-norleucine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIXSR

Absolute stereochemistry.

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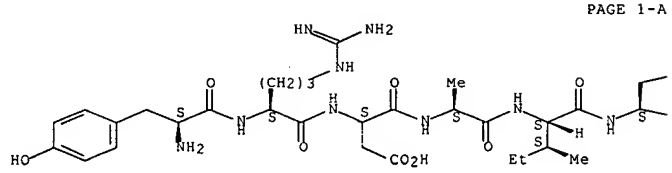

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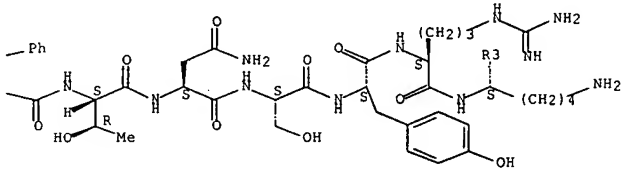

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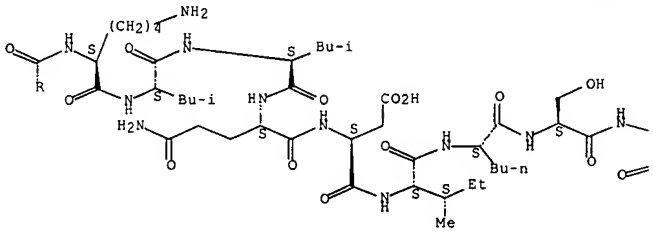

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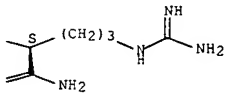

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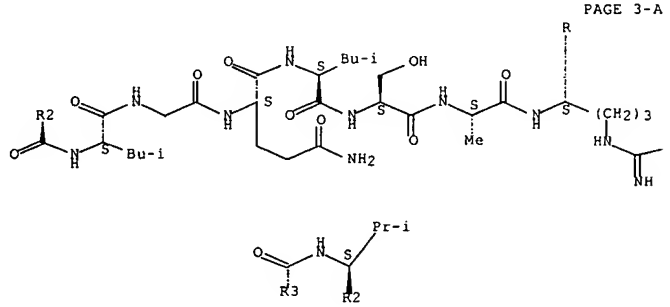

PAGE 3-B

L23 ANSWER 45 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:691 CAPLUS Full-text
DOCUMENT NUMBER: 106:691
TITLE: Comparative structural requirements of thirty GRF analogs for interaction with GRF and VIP receptors and coupling to adenylate cyclase in rat adenopituitary, liver and pancreas
AUTHOR(S): Robberecht, Patrick; Waelbroeck, Magali; Coy, David; De Neef, Philippe; Camus, Jean Claude; Christophe, Jean
CORPORATE SOURCE: Med. Sch., Univ. Libre Bruxelles, Brussels, Belg.
SOURCE: Peptides (New York, NY, United States) (1986), 7(Suppl. 1), 53-9
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The ability of (1-29)-human growth hormone-releasing factor-NH2 [(1-29)-GRF-NH2] [86168-78-7] and 30 analogs to stimulate adenylate cyclase [9012-42-4] activity was investigated in membranes from adenopituitary, liver, and pancreas of rat. In adenopituitary membranes, GRF and GRF analogs interacted with specific GRF receptors, whereas in liver and pancreatic membranes, they interacted with VIP [37221-79-7] receptors. The C-terminal moiety of GRF was responsible for GRF receptor recognition, since the hybrid analog [(1-9)-(His1,D-Ala2)-GRF]-(10-28)-VIP [105605-65-0] stimulated pituitary adenylate cyclase through the occupancy of VIP receptors only. When GRF of VIP

receptors were occupied by GRF analogs, the N-terminal part of the ligand appeared critical for adenylate cyclase activation. This was established by testing 30 GRF analogs mono-, bi-, or tri-substituted in positions 1-10. Major observations included: the characterization of (1-29)-(N-Ac-Tryl,D-Arg2)-GRF-NH2 [93942-91-7] as an antagonist of GRF-stimulated pituitary adenylate cyclase; the discovery of (1-29)-(N-Ac-Tyrl,D-Phe2)-GRF-NH2 [93965-89-0], (1-29)-(Hisl,D-Ala2,D-Ser3,NLeu27)-GRF-NH2 [105581-54-2], and (1-29)-(Hisl,D-Ala2,D-Thr7,NLeu27)-GRF-NH2 [105568-06-7] as specific antagonists of VIP receptors in rat pancreatic membranes; the importance of the free NH2 function of amino acid residue 1 for pancreatic adenylate cyclase activation; and the decreased efficiency of iodinated (1-29)-(Tryl)-GRF-NH2 as opposed to the noniodinated form, in all systems.tested.

IT 93942-91-7
RL: BIOL (Biological study)
(adenylate cyclase of rat stimulation by, of human, receptors of liver and pancreas and pituitary gland in relation to)

RN 93942-91-7 CAPLUS

CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

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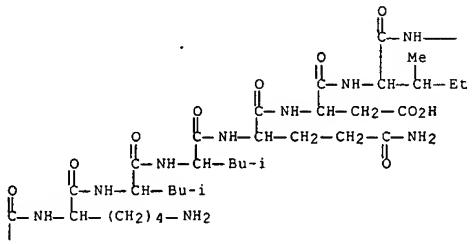

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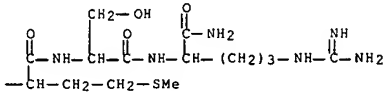

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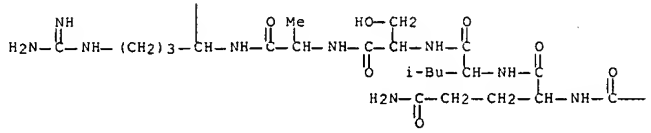

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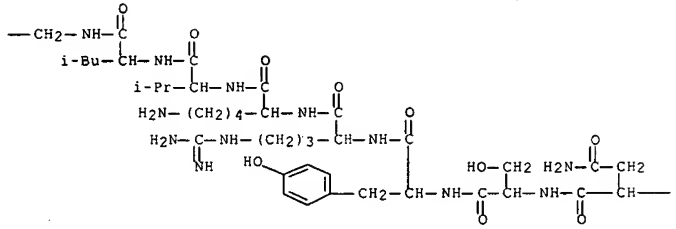

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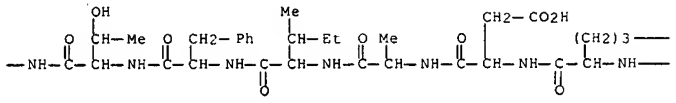

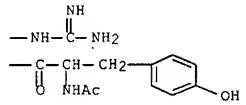

L23 ANSWER 46 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:565181 CAPLUS Full-text
DOCUMENT NUMBER: 105:165181
TITLE: Strategies in the design of synthetic agonists and antagonists of growth hormone releasing factor
AUTHOR(S): Coy, David H.; Murphy, William A.; Lance, Valentine A.; Heiman, Mark L.
CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA
SOURCE: Peptides (New York, NY, United States) (1986), 7(Suppl. 1), 49-52
CODEN: PPTDD5; ISSN: 0196-9781
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Analog studies on the sequence-related 1-12 region of growth hormone-releasing factor (1-29) amide [GRF(1-29)NH2] [86168-78-7] carried out. Replacement of each of the 1st 11 amino acids by its D-isomer in turn gave a total of 5 analogs exhibiting increases in potency. Other analogs containing multiple D-amino acid replacements were also examined and potent, for instance: D-Tyr-1,D-Ala-2 [104670-92-0], 2630; His-1,D-Ala-2 [104670-93-1], 3440; Ac-His-1,D-Ala-2 [93942-90-6], 1574; D-Ala-2,Nle-27 [101366-31-8], 1840; D-Ala-2,D-Asn-8,Nle-27 [101383-49-7], 1580; D-Ala-2,D-Asp-3,D-Asn-8,Nle-27 [104670-94-2], 2000; D-Asp-3,D-Asn-8,Nle- 27 [101366-32-9], 3810 (GRF(1-29) = 100%). These results with D-isomers may reflect the presence of reverse turns (β-bends) in this region of GRF. Indeed, the qual. predictive method of Chou and Fasman supports this theory and indicates reverse turns in the 1-5 and 6-10 sequences. In introducing even more rigidity into the N-terminal region via disulfide bond formation between positions normally containing aromatic amino acids, none of the bridged peptides displayed biol. activity which suggests that chain folding does not produce any proximity among N-terminal residues. Since position 2 was extremely sensitive to both conformational and side-chain alterations, this observation was extended to analogs containing sarcosine and proline, both of which were also inactive on growth hormone (GH) [9002-72-6] release at the doses tested. Previously, 2 position 2 analogs, Ac-D-Tyr-1,D-Arg-2 [104670-95-3]- and [Ac-Tyr-1,D-Phe-2]-GRF(1-29)NH2 [93965-89-0] were found to be competitive antagonists of GRF adenylate cyclase activity in various tissues but were not able to block the in vivo or in vitro GH-releasing activity of GRF. Likewise, none of the new position 2 peptides were able to block the GH-releasing activity of GRF indicating that their loss of biol. activity is caused by reduced receptor affinities.

IT 104670-95-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(growth hormone releasing activity of, structure in relation to)
RN 104670-95-3 CAPLUS
CN Somatoliberin (human pancreatic islet), 1-(N-acetyl-D-tyrosine)-2-D-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

NTE modified

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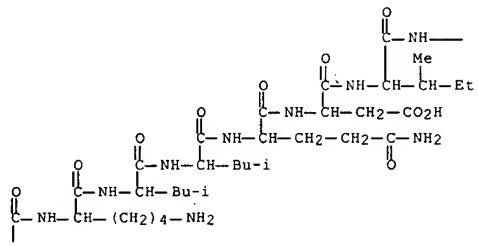

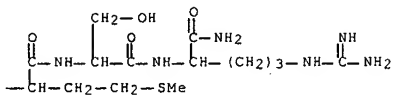

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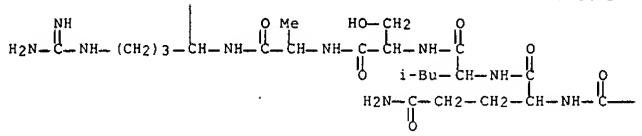

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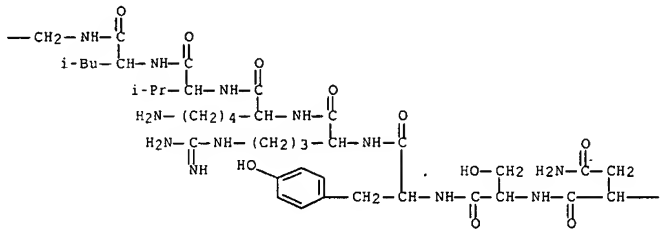

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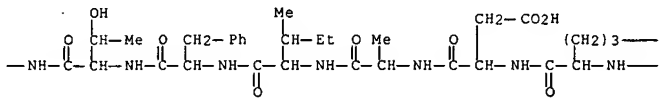

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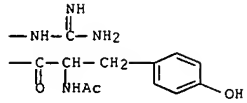

L23 ANSWER 47 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:606774 CAPLUS Full-text
DOCUMENT NUMBER: 103:206774
TITLE: Structural requirements for the activation of rat anterior pituitary adenylate cyclase by growth hormone-releasing factor (GRF): discovery of (N-Ac-Tyr1, D-Arg2)-GRF(1-29)-NH2 as a GRF antagonist on membranes
AUTHOR(S): Robberecht, Patrick; Coy, David H.; Waelbroeck, Magali; Heiman, Mark L.; De Neef, Philippe; Camus, Jean Claude; Christophe, Jean
CORPORATE SOURCE: Med. Sch., Univ. Libre Bruxelles, Brussels, B-1000, Belg.
SOURCE: Endocrinology (1985), 117(5), 1759-64
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The efficacy and potency of 14 growth hormone-releasing factor (GRF) analogs, substituted in position 1-7, on adenylate cyclase [9012-42-4] activation in crude homogenates from rat anterior pituitary were related to those of human pancreatic GRF(1-29)-amide [86168-78-7] and VIP [37221-79-7]. Among several D-amino acid substitutions, that in position 2 was the only 1 to yield a super-agonist [with a Kact (concentration required for half-maximal adenylate cyclase activation) 2-fold lower than that of GRF(1-29)-NH2]. By contrast, D-isomer substitution in position 1 and 3 was without effect and D-isomer substitution in position 4, 6, or 7 decreased the affinity of the analog. The N-acetylated analog of GRF was as potent and active as the parent peptide, and the identity of the amino acid in position 2 of [N-Ac-Tyr1]-GRF(1-29)-NH2 was determined for enzyme activation, with D-Phe2 and D-Trp2 derivs. acting as partial agonists and the [N-Ac-Tyr1,D-Arg2] analog being an efficient competitive antagonist of GRF(1-29)-NH2. With use of this antagonist, it was possible to demonstrate that GRP and VIP receptors represent distinct entities in the rat anterior pituitary.

IT 93942-91-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(adenylate cyclase of anterior pituitary response to)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-

argininamide- (9CI) (CA INDEX NAME)

NTE modified

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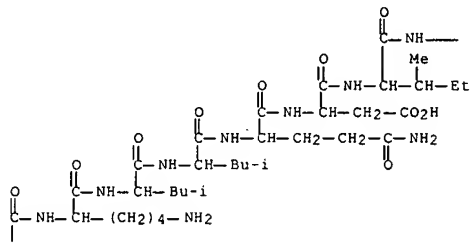

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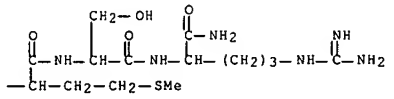

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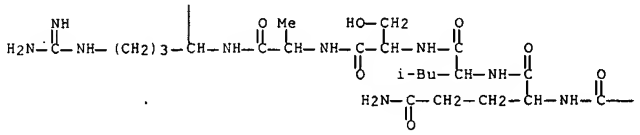

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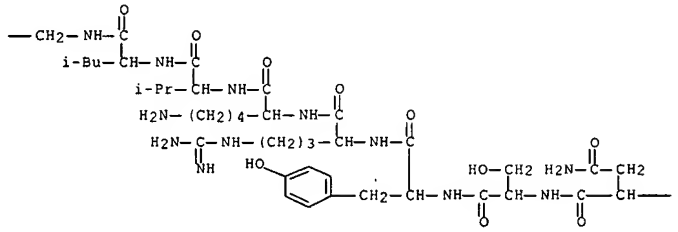

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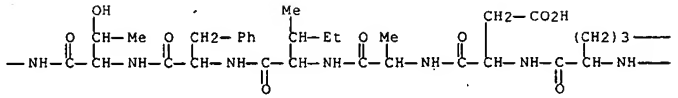

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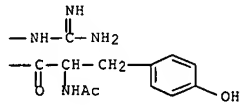

L23 ANSWER 48 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:448326 CAPLUS Full-text
DOCUMENT NUMBER: 103:48326
TITLE: Interaction of growth hormone-releasing factor (GRF) and 14 GRF analogs with vasoactive intestinal peptide (VIP) receptors of rat pancreas. Discovery of (N-Ac-Tyr1,D-Phe2)-GRF(1-29)-NH2 as a VIP antagonist
AUTHOR(S): Waelbroeck, Magali; Robberecht, Patrick; Coy, David H.; Camus, Jean Claude; De Neef, Philippe; Christophe, Jean
CORPORATE SOURCE: Med. Sch., Univ. Libre Bruxelles, Brussels, B-1000, Belg.
SOURCE: Endocrinology (1985), 116(6), 2643-9
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adenylate cyclase [9012-42-4] stimulation by human pancreatic growth hormone-releasing factor (GRF) [83930-13-6] and 14 GRF analogs (modified in the N-terminal part) was compared to the capacity of the same peptides to inhibit 125I- labeled VIP [37221-79-7] binding in rat pancreatic plasma membranes. These peptides interfered with VIP receptors as they inhibited 125I-VIP binding, and probably acted through VIP-preferring receptors as one of these peptides [(N-Ac-Tyr1,D-Phe2)-GRF(1-29)-NH2 [93965-89-0]] selectively inhibited both VIP- and GRF-stimulated adenylate cyclase activities. Alterations in positions 6 and 7 (but not in positions 1-4) markedly reduced the affinity of the resulting GRF analog [based on Kact (concentration exerting half-maximal stimulation) values]. The intrinsic activity exerted by GRF analogs on adenylate cyclase was reduced by acetylation of the free NH2 group and by the replacement of Asp3, Ala4, Phe6, and Thr7 by the corresponding D-isomer. The presence of pCl-Phe6 and Trp6 also depressed this parameter. Substitution in GRF (or its N-acetylated derivative) by D-Phe2, D-Arg2, and D-Ala4 again reduced the intrinsic activity, whereas substitution of the natural L-amino acid residue by D-Ala2 and Phe4 gave superagonists.
IT 93942-91-7
RL: BIOL (Biological study)
(adenylate cyclase stimulation by, in pancreas membrane, VIP receptor binding in relation to)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-

argininamide- (9CI) (CA INDEX NAME)

NTE modified

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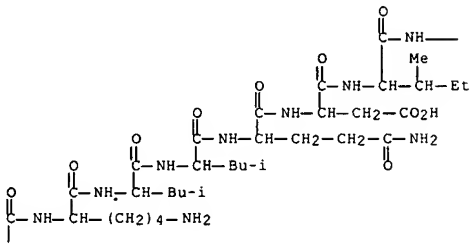

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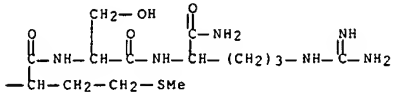

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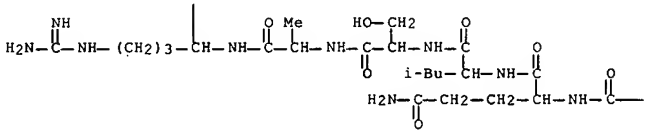

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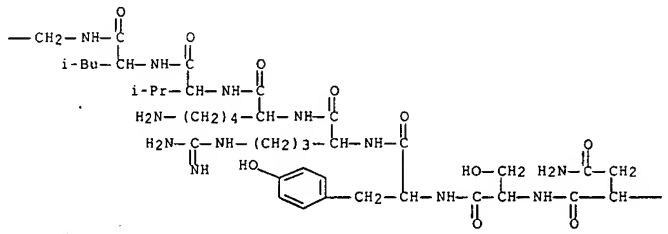

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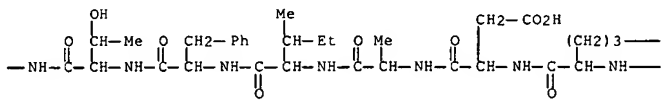

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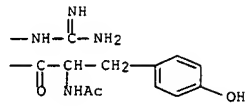

L23 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:56275 CAPLUS Full-text
DOCUMENT NUMBER: 102:56275
TITLE: Structure-activity studies on the N-terminal region of growth hormone releasing factor
AUTHOR(S): Coy, David H.; Murphy, William A.; Sueiras-Diaz, Javier; Coy, Esther J.; Lance, Valentine A.
CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA
SOURCE: Journal of Medicinal Chemistry (1985), 28(2), 181-5
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of replacement of some L-amino acids with D-amino acids in the pancreatic growth hormone-releasing factor (1-29)-amide [GRF(1-29)] [86168-78-7] on its activity was investigated. The effect of side-chain chemical on the position 2-D-amino acid and substituents on the phenylalanine ring in position 6 were also examined The analogs were synthesized by the solid-phase method on benzhydrylamine resin, purified by medium-pressure reverse-phase liquid chromatog., and tested in male rats. [4-D-Alanine]-GRF [94061-36-6] showed a slightly higher activity than GRF, [5-D-isoleucine]-GRF [94062-18-7], an analog further along the peptide chain from the N-terminus, showed loss of activity, whereas [8-D-asparagine]-GRF [94061-38-8] was twice as active as GRF. Structure-activity relations are discussed.

IT 93942-95-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(growth hormone-releasing activity of)
RN 93942-95-1 CAPLUS
CN Somatoliberin (human pancreatic islet), 2-D-arginine-29-L-argininamide-30-de-L-glutamine-31-de-L-glutamine-32-deglycine-33-de-L-glutamic acid-34-de-L-serine-35-de-L-asparagine-36-de-L-glutamine-37-de-L-glutamic acid-38-de-L-arginine-39-deglycine-40-de-L-alanine-41-de-L-arginine-42-de-L-alanine-43-de-L-arginine-44-de-L-leucinamide- (9CI) (CA INDEX NAME)

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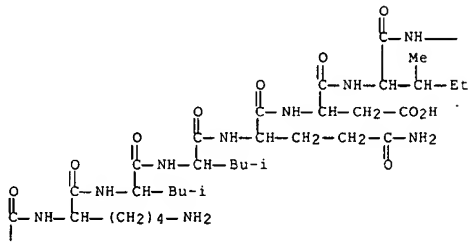

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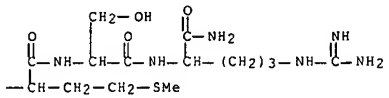

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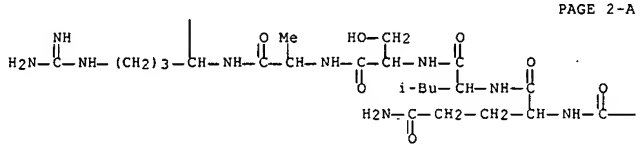

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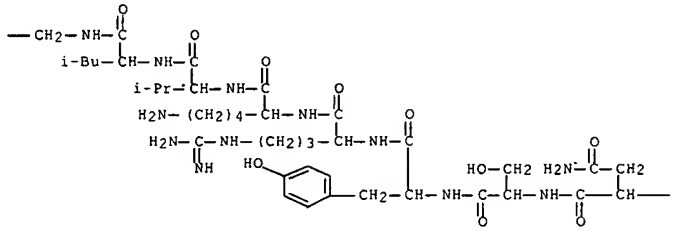

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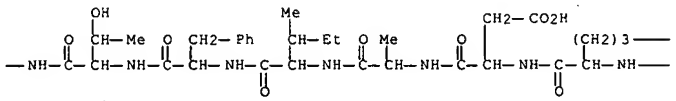

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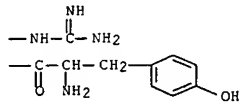
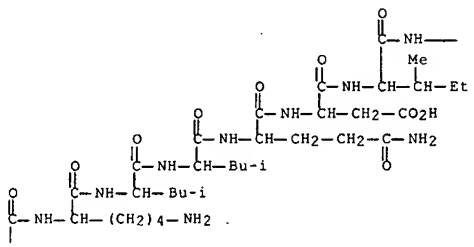


IT 93942-91-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and growth hormone-releasing activity of)
RN 93942-91-7 CAPLUS
CN 1-29-Somatoliberin (human pancreatic islet), N-acetyl-2-D-arginine-29-L-argininamide- (9CI) (CA INDEX NAME)

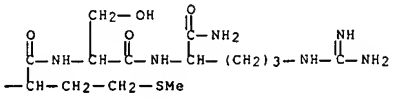
NTE modified

SEQ 1 YRDAIFTNSY RKVLGQLSAR KLLQDIMSR

PAGE 1-A



PAGE 1-B



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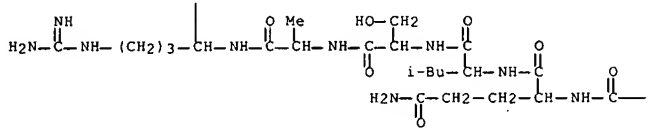
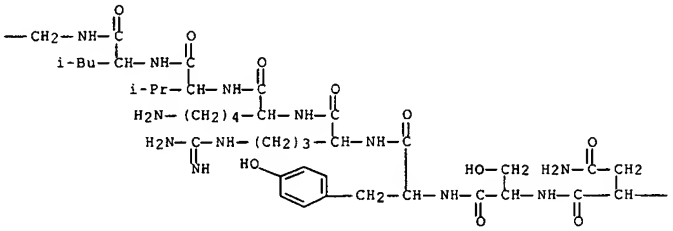


PAGE 2-B



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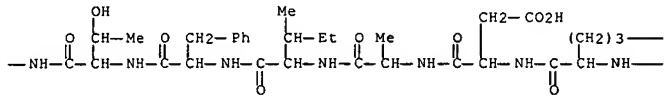

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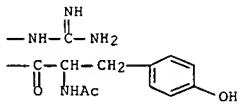

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SEARCH HISTORY

=> d his nofile

(FILE 'HOME' ENTERED AT 11:58:35 ON 20 SEP 2007)

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E US2006-566776/APPS
L1 1 SEA ABB=ON US2006-566776/AP
D SCAN
L2 1256 SEA ABB=ON SCHALLY A?/AU
L3 840 SEA ABB=ON VARGA J?/AU
L4 101 SEA ABB=ON ZARANDI M?/AU
L5 1127 SEA ABB=ON CAI R?/AU
SEL RN L1

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                ..[K'ORN''HAR''CIT''NLE'A]VL[GA'ABU''AIB''NLE'Q'CIT'H][QR]LS[A'
                ABU'][HR'CIT'][K'ORN''CIT'][LA'AIB']LQDI[ML'NLE''ABU'R][R'HAR'S
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                SAVE TEMP L9 HA776SEQ1/A

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     FILE 'LREGISTRY' ENTERED AT 12:10:34 ON 20 SEP 2007
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                IB']LQDI'NLE'R'HAR'/SQSP

     FILE 'REGISTRY' ENTERED AT 12:15:46 ON 20 SEP 2007
L11           5 SEA ABB=ON  YRDA[IV]FTAHYH'ORN'VL'ABU'[QR]LS[A'ABU']H'ORN'[LA'A
                IB']LQDI'NLE'R'HAR'/SQSP
                SAVE TEMP L11 HA776SEQ2/A
                D LC 1-5
L12         111 SEA ABB=ON  L6 AND L9
L13           5 SEA ABB=ON  L6 NOT L9
                D SCAN

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L14          73 SEA ABB=ON  L9
L15           3 SEA ABB=ON  L11
L16          49 SEA ABB=ON  L14 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'CAPLUS' ENTERED AT 12:18:46 ON 20 SEP 2007
L17          49 SEA ABB=ON  (L1 AND L14) OR (L2 AND L3 AND L4 AND L5) OR ((L2
                OR L3 OR L4 OR L5) AND L14)
L18          49 SEA ABB=ON  (L1 AND L14) OR ((L2 OR L3 OR L4 OR L5) AND L14)
L19           3 SEA ABB=ON  (L1 AND L14) OR (L2 AND L3 AND L4 AND L5 AND L14)
L20          48 SEA ABB=ON  L14 AND ((L2 AND (L3 OR L4 OR L5)) OR (L3 AND (L4
                OR L5)) OR (L4 AND L5))
                D QUE L19
                D IBIB ABS HITSEQ L19 1-3

     FILE 'REGISTRY' ENTERED AT 12:21:40 ON 20 SEP 2007
                D QUE L11

     FILE 'CAPLUS' ENTERED AT 12:21:54 ON 20 SEP 2007
                D QUE L15
L21           2 SEA ABB=ON  L15 NOT L19
                D IBIB ABS HITSEQ L21 1-2
L22           1 SEA ABB=ON  L15 AND L19
                D SCAN TI

     FILE 'REGISTRY' ENTERED AT 12:22:32 ON 20 SEP 2007
                D QUE L9

     FILE 'CAPLUS' ENTERED AT 12:22:37 ON 20 SEP 2007
                D QUE L16
L23          49 SEA ABB=ON  L16 NOT (L19 OR L15)
                SEL HIT RN L23
                D COST
                D IBIB ABS HITSEQ L23 1-49

     FILE 'HOME' ENTERED AT 12:24:16 ON 20 SEP 2007
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